Women of Color Health Data Book

OFFICE OF THE DIRECTOR
NATIONAL INSTITUTES OF HEALTH

ACKNOWLEDGEMENTS

This data book was prepared by Wilhelmina A. Leigh, Ph.D. (Senior Research Associate) and Malinda A. Lindquist (Research Assistant) of the Joint Center for Political and Economic Studies. The authors gratefully acknowledge the institutional support of the Joint Center and its staff. In addition, an intellectual debt to the Women's Research and Education Institute must be paid. Its biannual text, *The American Woman*, which featured health in its 1994-1995 edition, included a chapter by Wilhelmina A. Leigh on "The Health Status of Women of Color." Although this chapter was the prototype for this data book, the current volume expands and updates the seminal chapter, including separate sections on adolescents and the elderly, as well as graphics to help tell the story.

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WOMEN OF COLOR HEALTH DATA BOOK

ADOLESCENTS TO SENIORS

OFFICE OF RESEARCH ON WOMEN'S HEALTH

OFFICE OF THE DIRECTOR

NATIONAL INSTITUTES OF HEALTH

FOREWORD

Publication of the Office of Research on Women's Health Women of Color Health Data Book: Adolescents to Seniors marks a noteworthy milestone in our Nation's recognition of the importance of women's health and, more specifically, the role of culture, ethnicity, race, socioeconomic background, geographic location, and other social and economic factors as important contributors to health status. After too many years of viewing health in isolation, we have begun to study and understand women's health as a reflection of the myriad of elements that contribute to the overall quality of women's lives in the United States today.

This report also marks the culmination of many years of effort by individuals and organizations both within and outside the Federal government to address the health of minority women. The Joint Center for Political and Economic Studies, which first published data on the health of minority women in its 1992 report, A Health Assessment of Black Americans: A Fact Book, has been among the most effective organizations working to focus our Nation's attention on these issues. In 1985, the Department of Health and Human Services (DHHS) published the Report of the Secretary's Task Force on Black and Minority Health (1), which documented disparate disease prevalence, progression, and health outcomes, including excessively high mortality rates, for minorities from many conditions that affect all segments of the United States population.

The DHHS report, coupled with an increased level of attention accorded to women's health issues during the past decade, resulted in the establishment of new offices, laws, and policies to foster study of women's health issues and to promote the broader inclusion of women and minority members in biomedical research. These changes reflect the now widespread recognition that, in order for the results of biomedical and behavioral research to be widely applicable, researchers and clinicians must understand how cultural and racial differences may influence the causes, diagnoses, progression, and treatment of diseases among different populations, including women of diverse racial, cultural, and ethnic origins, geographic locations, and economic backgrounds. This data book will aid policy makers and researchers in understanding the health status of women of color in this country in order to formulate policies and research priorities to improve the health of all women in the United States.

The challenge inherent in women's health research is to establish a scientific knowledge base that will permit reliable diagnoses and effective prevention and treatment strategies for all women, including those of diverse cultural and ethnic origins, geographic locations, and economic status. The ultimate goal is to increase medical knowledge through sound science and thereby to inform the development of policies and medical standards from which all women—and men—can benefit equally. Just as gender constitutes a parameter that must be incorporated in the design of clinical research studies if the results of such research are to be widely applied through health care policies and interventions, so too must racial, ethnic, and cultural factors be taken into account in the design and implementation of research protocols.

Over the past 12 years, evolving scientific, public, and political perceptions have led to policies that mandate broader inclusion of both women and men of diverse racial, cultural, and ethnic origins, geographic locations, and economic backgrounds in clinical research studies. The need for a better understanding of if—and how—sex, gender, cultural, and racial differences influence the pathobiology, etiology, diagnosis, progression, treatment, and outcome of diseases among different populations has also resulted in changes in research topics and strategies.

The fact that women and minorities have not been routinely included in clinical research is, to some degree, attributable to many historical events, including the tragic Tuskegee syphilis study in which African-American men suffering from syphilis were denied treatment so that researchers could document disease progression. The Tuskegee study left a bitter legacy of fear and distrust in the minority community about participation in research studies, while the fetal developmental abnormalities associated with thalidomide use and the carcinogenic effects of diethylstilbestrol in the children of pregnant women resulted in clinical, ethical, and legal concerns about the inclusion of women who are pregnant or of childbearing age in clinical trials. Policies based on ethical concerns have contributed to the exclusion of women and minorities from clinical research as a means of preventing their exploitation.

Policies for the inclusion of women and minorities in clinical research funded by the National Institutes of Health (NIH) have their origins in the women's health

movement. The publication of a report by the Public Health Service Task Force on Women's Health in 1985 (2) prompted NIH to promulgate a policy urging the inclusion of women in clinical research. Later, in 1987, minority and other scientists at NIH recognized the need to address the inclusion of minority populations. So, in a later 1987 version of the NIH Guide, a policy encouraging the inclusion of minorities in clinical studies was first published (3). Following the release of a 1990 General Accounting Office report documenting problems with the implementation of this policy (4) and the subsequent establishment of the Office of Research on Women's Health in September 1990, this inclusion policy was strengthened and expanded.

The NIH Revitalization Act of 1993 (Public Law 103-43) legislatively mandated the inclusion of women and members of minority groups in all research studies supported by NIH, thus superseding and expanding previous policies. The resulting modifications to the NIH guidelines on inclusion, published in March 1994, (5) require that women and minorities and their subpopulations be included in all human subject research supported by NIH; that women and minorities and their subpopulations be included in Phase III clinical trials in numbers adequate to allow for valid analyses of differences in intervention effect; that cost is not allowed as an acceptable reason for excluding these groups; and, that NIH initiate programs and support for outreach efforts to recruit and retain women and minorities and their subpopulations as volunteers in clinical studies.

While the new guidelines require inclusion, they also recognize that inclusion must be determined by science. Depending on the scientific issues under study, not every investigation requires the inclusion of every minority group, or even in some instances, both sexes. Most importantly, researchers have the opportunity to gather information on women and minorities when hypotheses are being formulated, thereby allowing for the variables of gender, race, ethnicity, and socioeconomic background to be taken into account while studies are being designed.

Although investigators are now required by public law to include women and minority groups as subjects in clinical research, NIH recognizes that there are other barriers to overcome in recruiting and retaining women of diverse backgrounds as research subjects. Such barriers include the need for cultural diversity among researchers, closer relationships between researchers and the communities to be studied, overcoming significant logistical problems related to women's roles as care givers and as salaried workers, and an appreciation of differences in cultural beliefs of potential participants. The Office of Research on Women's Health is addressing these barriers through a number of programs and activities, of which this report is just one.

This data book, with its focus on the totality of factors that contribute to health, will prove an invaluable resource for policymakers and advocates for women's health research in understanding the health status of women of color and taking action to address more fully the needs of these women. It will also aid investigators as they design studies and recruit women from diverse communities for participation in clinical research, allowing all American women to participate in such studies and to benefit equally from the fruits of publicly supported research.

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HIGHLIGHTS

IN THIS REPORT THE TERM WOMEN OF COLOR ENCOMPASSES FOUR MAJOR GROUPS OF WOMEN—NATIVE, HISPANIC, BLACK, AND ASIAN AMERICANS—WITH SUBGROUPS WITHIN EACH OF THE MAJOR GROUPS. THE HEALTH OF ADOLESCENT AND ELDERLY WOMEN OF COLOR RECEIVES SEPARATE ATTENTION AS WELL. THESE FOUR GROUPS INCLUDE MANY SUBPOPULATIONS WHOSE HEALTH STATUS VARIES FROM BETTER THAN THE UNITED STATES AVERAGE (E.G., JAPANESE AND CUBAN AMERICANS WITH PRENATAL CARE) TO WORSE THAN THE UNITED STATES AVERAGE (E.G., BLACK AND AMERICAN INDIAN/ALASKA NATIVE WOMEN WITH AMPUTATIONS DUE TO DIABETES).

The following points highlight some of the important issues relating to the health status of women of color today:

- Although life expectancies vary widely among the many subpopulations of women of color, Asian subpopulations (in Hawaii) report the longest life expectancies, followed by Hispanic, Native Hawaiian, Guamanian, and Samoan women with comparable life expectancies. American Indian/Alaska Native and black American women report the shortest life expectancies.
- Obesity, defined as excess body weight for height, is a problem for all women of color, but especially for American Indian/Alaska Native, Pacific Islander, and black American women. The high incidence of adult-onset diabetes is a major problem for women of color (especially Native American and black American women), in part because of obesity.
- Current cigarette smoking among women of color ranges from about half of American Indian/Alaska Native women to slightly more than an eighth of Asian women. The use of tobacco (both smokeless and smoking cigarettes) varies with age, income, and length of time in the United States.
- For a variety of reasons (financial, cultural, informational, and access-related among them), sizable proportions of the subpopulations of women of color report that they do not avail themselves of preventive health tests such as Pap smears and mammograms on a regular basis. For example, two-thirds of immigrant Asian women report never having had a Pap smear, and roughly 70 percent reported never having had a mammogram. In addition, among all Hispanic, black, and Asian women over the age of 40, more than half reported not having had a mammogram within the past two years.
- Although women of color are only about a fourth of all women, they were close to half (46 percent) of the 19 million uninsured women in the United States in 1995. This lack of insurance coverage often translates into the failure to get needed health care in a timely manner.
- Heart disease and cancer are the major killers among women of color, as they are among the rest of the population. Other prominent causes of death among women of color include: HIV/AIDS (especially black and Hispanic women, mainly Puerto Ricans); homicide and unintentional injuries (especially among black, Hispanic, and American Indian/Alaska Native women); and alcohol-related diseases (especially among American Indian/Alaska Native women).
- Cancers are the second leading cause of death for women of color, except for Asian American and Pacific Islander American women for whom they are the leading cause of death. For breast cancer in particular, although black women have a lower incidence, their death rates from this disease exceed the death rates for all other subpopulations of women. Five-year survival rates for black and Hispanic women after diagnosis with breast cancer also are lower than the 5-year survival rate for white women.
- Undercounting, failing to collect subpopulation data, and misidentifying women of color are the major problems associated with collecting data on them.
- Guidelines for preventive medical testing and for research often fail to incorporate and reflect the distinct needs of women of color.
- A greater number of community-based medical facilities with culturally sensitive health care providers are needed to serve women of color.

FACTORS AFFECTING THE HEALTH OF WOMEN OF COLOR

FACTORS AFFECTING THE HEALTH OF WOMEN OF COLOR

Ethnic and Racial Heritage*

Of the more than 265 million people counted as United States residents in August 1996, more than half (nearly 52 percent) were women, and more than 36 million were women of color. These 36 million women of color include: 46 percent black, 38 percent Hispanic, 13 percent Asian and Pacific Islander, and 3 percent American Indian/Alaska Native women (1). Women of color are more than a fourth (27 percent) of all U.S. women. In raw numbers, there are nearly 17 million black American women, nearly 14 million Hispanic women, nearly 1 million American Indian/Alaska Native women, and more than 4.7 million Asian and Pacific Islander women.

The fastest growing minority group is Asian and Pacific Islander Americans, whose population increased by nearly 108 percent between 1980 and 1990 and 28 percent between 1990 and 1996. The group that is second in its growth rate is Hispanics, growing by 53 percent during the 1980-1990 period and 24 percent between 1990 and 1996. The American Indian/Alaska Native population increased by nearly 38 percent during the 1980-1990 decade, while blacks grew by only 13 percent and whites by 6 percent (1,2). Between 1990 and 1996, both the American Indian/Alaska Native and the black American populations grew by 9 percent, and the white population grew by 3 percent.

Native Americans

Under Title VIII of the 1975 Native American Programs Act, the following groups are defined as Native Americans—American Indians, Alaska Natives (Eskimos and Aleutians), Native Hawaiians, Samoans, and other native Pacific Islanders (3,4,5). Health data for Native Hawaiians, Samoans, and other Pacific Islanders, however, often are aggregated with data for Asian Americans under the rubric Asian and Pacific Islanders, a practice that obscures both the differences between the Asian and the native Pacific Islander subpopulations and the similarities in outcomes for native Pacific Islanders and American Indians/Alaska Natives. To the extent that data allow, this fact book discusses Native Hawaiian and other native Pacific Islander women as Native Americans and covers Asian American women separately.

American Indians/Alaska Natives

The ancestors of the people known today as American Indians/Alaska Natives came across the Bering Strait to live in North America many centuries before Europeans came. Although 12 to 15 million Indians were here when Columbus arrived in 1492, today their progeny number around 2 million.

American Indians/Alaska Natives are the smallest of the four major racial/ethnic subpopulations discussed in this report. They are constituted as 535 federally recognized (plus 100 not recognized) tribes in seven nations (such as the Navajo or Iroquois) on nearly 300 reservations in the lower 48 states and in approximately 500 government units in Alaska (4,5,6). The many American Indian/Alaska Native subpopulations are culturally distinctive, diverse, and complex—and, as noted above, are growing three times more rapidly than the white population. American Indians/Alaska Natives speak more than 300 distinct languages, which makes their dialects more diverse than the entire Indo-European language family (5).

This diversity, coupled with their many small population groups scattered throughout the United States, has made it difficult to provide a uniform, readily accessible health care system for American Indians/Alaska Natives. The 1990 Census reported that nearly three-fifths (59 percent) of the 2.2 million American Indians lived in urban areas, in contrast to a somewhat smaller share of Eskimos (50 percent) and a larger share

* Women of color are discussed in rough chronological order of the arrival of any member of their group in the United States. Native American refers both to American Indians and Alaska Natives (Eskimos and Aleutians) and to the native Pacific Islander subpopulations (e.g., Native Hawaiians, Samoans, Guamanians, and Tongans) who are United States residents. Hispanic refers to the Spanish-surnamed and Spanish-speaking residents of the United States. This term is used more often than Latina because it is used in most of the data sources on which this report is based. Black is used more often than African American to signify that this group includes black West Indians and other members of the African diaspora who might not be both of African descent and American. Asian Americans are the subpopulations of Chinese, Japanese, Filipino, Korean, Vietnamese, et al., who reside in the United States.

of Aleuts (69 percent) (7). Others estimate that a third live in urban areas, another third live on reservations, and a third move back and forth between the two (5).

Although American Indians/Alaska Natives are culturally diverse to the point that it often becomes meaningless to classify them together for any but the most gross comparisons, their shared experiences include:

- the rapid and forced change from a cooperative, clan-based society to a capitalistic and nuclear family-based system;
- the outlawing of language and spiritual practices;
- the death of generations of elders to infectious diseases or war; and
- the loss of the ability to use the land walked by their ancestors for thousands of years (6).

These experiences have fostered the development of several characteristics among American Indians/Alaska Natives that influence their behavior when seeking and responding to health care services. Native people are generally strongly autonomous, are non-linear thinkers (especially about time), use indirect communication and styles, and have a historical suspicion of authority (5).

Receiving health services via the Federal Government, as American Indians/Alaska Natives do because of treaty obligations, influences their ability to access and use these services. The U.S. Government has signed over 800 treaties with tribes, obligating them to maintain a reasonable level of education and health among American Indians/Alaska Natives (5). The Indian Health Service (IHS)—since 1955 a part of the United States Public Health Service—provides health care through its clinics and hospitals to all American Indians/Alaska Natives who belong to federally recognized tribes and live on or near the reservations in its 12 service areas. These service areas contain 144 service units (analogous to county or city health departments) that operate hospitals, and health centers and stations (8). Of the 144 units, the 68 operated by the IHS administer 38 hospitals and 112 health centers and stations in fiscal year 1996. The remaining 76 service units operated by American Indian and Alaska Native tribal governments administer 11 hospitals and 372 health centers and stations. As of October 1, 1995, 34 Indian-operated urban projects, either health clinics or community services and referrals, provided care for the American Indians/Alaska Natives who live in urban areas and, therefore, have lost eligibility for IHS care near their reservations as the result of living away from them for 180 days (4,9).

Although the IHS reports that it serves approximately 60 percent of all American Indians/Alaska Natives, services in urban areas and in nonreservation rural areas often are very limited and uncoordinated (6,9). In 1987, only 41 percent of all American Indians/Alaska Natives included in the 1987 Survey of American Indians and Alaska Natives (SAIAN) reported having IHS facilities as a source of health care all year (10). An additional 25 percent reported having private coverage and 18 percent reported public coverage throughout the year. The remaining 16 percent indicated that they had some other type of health insurance coverage for part of the year. The SAIAN also found that, among residents of metropolitan statistical areas (MSAs), only 24 percent reported the IHS as their form of health insurance throughout the year, with 35 percent of the residents of MSAs stating that they had private coverage (10).

Geographic disparities in the location of facilities and the small number of facilities in urban areas account in part for urban American Indian women having both greater difficulties in obtaining access to prenatal care and less likelihood of getting such care than either black or white women (11). For example, there are only two IHS health units east of the Mississippi River (a clinic in Nashville, Tenn., and a hospital in Cherokee, N.C.) to serve all the American Indians from Maine to Florida (12). In addition, the Phoenix service area (with a population of 139,993 in fiscal year 1997) has eight hospitals, while there are none in the Portland, Ore., service area, or in the state of California (with populations of 147,887 and 123,208, respectively) (8,9).

How has the legacy of American Indians/Alaska Natives in this country influenced the health of Indian women? The major legacy of the forced relocation of American Indians throughout the United States has been to place them in communities in which they confront racism and hostility from their non-Native neighbors (13). Forced relocation took place both in the 1830-1850 period, when tribes were relocated from lands east of the Mississippi River to Oklahoma, and in the 1950s, when, in an attempt to mainstream them, American Indians were given one-way transportation by the Bureau of Indian Affairs to relocate to urban areas (4,8,14). Instead of mainstreaming, urban living brought continued unemployment and poverty to many American Indians/Alaska Natives. When compared to forced migrants from Indian reservations to urban areas, such as Los Angeles, voluntary migrants tend to be more successful (4).

Racism, coupled with a mistrust of the U.S. Government, has engendered low self-esteem among many American Indians/Alaska Natives. Racism and discrimination also have contributed to the poverty in which 27 percent of American Indians/Alaska Natives live.

Specifically, 27 percent of American Indians, 26 percent of Eskimos, and 13 percent of Aleutians reported incomes below the federal poverty level in 1990 (15). Poverty rates among female-headed American Indian/Alaska Native households are even greater than poverty rates for individuals. Although 26 percent of all American Indian/Alaska Native households were female-headed, 50 percent of these households had incomes below the poverty level. Fifty-one percent of all female-headed American Indian households had incomes below the poverty level, as did 39 percent and 31 percent of comparable Eskimo and Aleutian households (15). Half of all American Indian/Alaska Native children under the age of six are estimated to live in poverty.*

This poverty stems from the high unemployment rates among both American Indian/Alaska Native men and women. In 1990, although unemployment for men of all races was 6 percent, among American Indian men the rate was 16 percent (16). Although slightly better off than American Indian men, 13 percent of American Indian women were unemployed when the rate for women of all races was 6 percent.

Poverty and unemployment have in turn fostered welfare dependency and diets replete with government commodity foods, high both in fat and calories. The malnutrition that was a problem among American Indians/Alaska Natives two generations ago has been replaced by obesity (17). Sixty percent of both male and female urban American Indians/Alaska Natives are reported to be overweight and, therefore, at risk for diabetes and other illnesses. Approximately 20 percent of American Indians have diabetes, a rate twice that of the general United States population. Non-insulin dependent diabetes mellitus has reached epidemic proportions among some tribes (4,5). Although it remains less of a problem for Alaska Natives than for American Indians, the prevalence of diabetes mellitus among Alaska Natives has increased tenfold in the past 30 years (8). End-stage renal (kidney) disease is 2.8 times more common among American Indians than among whites, and the diabetes-attributable prevalence of end-stage renal disease is 5.8 times that of whites (17). Neuropathy and amputations also are common among American Indian diabetics. Age-adjusted death rates from diabetes mellitus among American Indians are 4.3 times that for whites and twice that for black Americans (8). A sedentary lifestyle and sharp decreases in hunting and gathering are implicated in the high prevalence of obesity and related health problems and mortality among American Indians/Alaska Natives.

Poverty has combined with the historical suppression of indigenous religions and medical practices to place American Indians/Alaska Natives at health risks due to environmental degradation. These health risks result from living in poor quality housing (often with lead-based paint that poisons the children) and exposure to local toxins. Half of all American Indians/Alaska Natives live in areas with uncontrolled toxic waste sites (18). Lacking a safe water supply or sewage disposal system or both, which characterized 28,700 American Indian/Alaska Native homes in fiscal year 1995, also places American Indians/Alaska Natives at risk of illness and disease (19). On some reservations one of every five homes lacks indoor plumbing.

The loss of access to traditional environments or ecosystems and the suppression of religious and medical practices threaten the body of knowledge developed from plants and herbs. As the environments supporting plant-derived compounds such as digitoxin and ephedrine are vanishing, the knowledge base among American Indians/Alaska Natives about the use of plants and herbs is vanishing even more rapidly (5). The fact that the IHS, in several of its facilities both on the mainland United States and in Alaska, allows medicine men and other traditional healers to hold clinic hours and treat patients in its facilities is a cooperative activity that may help counteract this. Sharing facilities in this manner not only may help foster and preserve American Indian/Alaska Native heritage, but also may expose IHS health professionals to non-western healing practices from which they may be able to learn (5).

The loss of access to the lands their ancestors roamed freely has extinguished the traditional gender roles for American Indian/Alaska Native males (as hunters, horsemen, and protectors). American Indian/Alaska Native men often have channeled their rage about this against American Indian/Alaska Native

* The poverty level differs for individuals and families by household composition and by size. For example, in 1995, although the poverty income level, or threshold, for four-person families averaged $15,569, this average includes a threshold of $15,455 for a four-person family with two children and two adults along with a threshold of $15,976 for a four-person family with one child and three adults. Thus, it is difficult to report the income levels that represent poverty for the populations discussed.

women, who must still fulfill the caretaker role for their families. Family violence among American Indians/Alaska Natives takes many forms—child abuse and neglect, elder abuse, spouse battering, spouse abandonment, and sexual abuse of young children (13). Violence is reported in 16 percent of all marital relationships among American Indians/Alaska Natives, with severe violence reported in 7 percent of these relationships (5).

Both the lack of tribal ordinances to deal with family violence and the refusal of local non-Indian law enforcement officials to take rapes reported by American Indian/Alaska Native women seriously (especially if they are alcoholics or substance abusers) limit the recourse of American Indian/Alaska Native women who seek help. In addition, many American Indian/Alaska Native women are reluctant to report mistreatment by the men in their lives to non-Indian authorities because of the history of harsh treatment of American Indian/Alaska Native men by the U.S. justice system.

Alcoholism and its multigenerational effects is at the root of many of the health problems experienced by American Indian/Alaska Native women, as evidenced by the magnitudes of their death rates from alcoholism, cirrhosis, and other liver diseases. Native American women often cope with prior victimization (from incest, rape, and other forms of sexual assault) by escaping into alcohol and drugs; doing so, though, contributes to higher mortality rates (20). Among American Indian and Alaska Native women, death rates associated with alcoholism are much higher than among women of all races. For the 1990-1992 period, mortality due to alcoholism among American Indian/Alaska Native women ages 25-34 years was nearly 21 per 100,000 population, in contrast to the nearly 2 per 100,000 rate for women of all races (16). American Indian/Alaska Native women ages 35-44 had a mortality rate due to alcoholism of 47 per 100,000 in 1990-1992, nearly 10 times the rate of U.S. women of all races.

American Indian/Alaska Native women who are alcoholics or substance abusers, however, seldom receive hospitalization, detoxification, or counseling for their addictions. Instead they are often jailed and lose their parental rights (5). In addition, alcoholism and substance abuse among their daughters often adds to the stresses of elderly American Indian/Alaska Native women who wind up parenting their grandchildren and/or great-grandchildren, as well as managing the chronic diseases typical in older women (13). The failure of addiction treatment programs, in particular, to incorporate healing elements from Native cultures, such as the medicine wheel, into their service offerings creates another barrier to seeking care. Many Natives view the use of Euro-American treatment models that focus on a single disease rather than the whole person as another form of oppression. This view thus renders the programs ineffective for American Indians/Alaska Natives (5).

The prevailing life circumstances for many American Indian/Alaska Native women jeopardize their health in yet another way, because poverty, low self-esteem, alcoholism, and substance abuse may interfere with their ability to seek preventive health care. The necessity of patronizing culturally insensitive providers located at great distances limits preventive health practices and places the day when measures such as breast self-examination have been adequately taught and accepted in American Indian/Alaska Native communities far into the future (13). Preventive health care for cancers may be even longer in becoming a reality because there are no words for cancer in some of the languages of indigenous people. Many feel that talking about the disease will bring it on and hold fatalistic views of it. In other Native traditions, cancer survivors are stigmatized (5).

The response to the human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) by American Indians/Alaska Natives reflects their long history of mistreatment by the U.S. Government and, consequently, the complexities related to providing treatment to them. HIV infection and AIDS also have not been given a meaning in indigenous languages. Thus, these conditions cannot be discussed in local tongues, nor can indigenous healing processes be applied to them. Consequently, HIV/AIDS is discussed solely as a "white man's disease," like the many other infectious diseases to which whites have exposed American Indians/Alaska Natives (12). This perception, coupled with the fact that the Federal Government does not pay American Indians/Alaska Natives to be tested for HIV infection—as it has paid them to participate in other federal health programs—leaves many American Indians/Alaska Natives both skeptical of the need for testing and unwilling to get it. The lack of confidentiality in IHS clinics also keeps many American Indians/Alaska Natives from getting tested and treated (5).

Many American Indians/Alaska Natives also view the Federal Government's emphasis on multicultural outreach in funding for HIV/AIDS prevention as favoring black Americans and as resulting in ethnic minority groups competing among themselves for very limited resources. American Indians/Alaska

Natives find it difficult to identify HIV/AIDS as something that can affect them, without a spokesperson who is an American Indian/Alaska Native to bring the message home in the way former basketball star Magic Johnson has for many young people and for black Americans (12).

Native Hawaiians and Other Pacific Islanders

The more than 365,000 Pacific Islander Americans come from more than 22 islands—either Polynesian, Micronesian, or Melanesian—and speak as many as 1,000 different languages (21,22). The vast majority are from the Polynesian islands, the islands in the central and south Pacific that are farthest from Asia. In 1990, 85 percent of Pacific Islanders—to be exact, more than 211,000 Native Hawaiians, nearly 47,000 American Samoans, and nearly 18,000 Tongans—were Polynesians (21,23). Native Hawaiians are the largest subpopulation, constituting 66 percent of all Pacific Islanders, with Samoans the next largest group at 15 percent (24,25). Ninety-three percent of the residents of American Samoa are Polynesian, including both Samoans and Tongans (who are 4 percent of the population), along with the 2 percent who are white, and the 5 percent who are of other racial/ethnic groups.

Micronesians are the second largest Pacific Islander group—about one in every seven Pacific Islanders—and Guamanians (more than 49,000 in 1990) are the largest Micronesian population (21,23). Making up 12 percent of all Pacific Islanders, most Guamanians are of mixed ancestry, descended from the native Chamorros of Guam, who have intermarried with settlers primarily from Spain, Japan, the Philippines, and the 50 U.S. states. The Chamorro are nearly half of the residents of Guam, with Filipinos a fourth, Chinese and Japanese together close to a fifth, and whites 10 percent (26). The second largest group of Micronesians are Belauans (formerly Palauans), who numbered just over 1,400 in 1990 (21). Other Micronesian Islands include the Carolines, the Marianas, the Marshalls, and the Gilberts (now the Republic of Kiribati) (27). Melanesians are only 2 percent of Pacific Islander Americans, with the more than 7,000 Fijians (including both natives and descendants of the Asian Indians who came to work the coconut plantations in the late 1800s and early 1900s) the dominant group.

Close to half (45 percent) of all Pacific Islander Americans lived in Hawaii in 1990; an additional 30 percent lived in California, 4 percent in Washington, and 2 percent each in Texas and Utah (21). Half of the Samoans counted in the 1990 Census lived in California, while a fourth of all Tongan Americans lived in Utah, many of them Mormon converts brought to the United States by missionaries (21).

Citizens of the autonomous governments of the islands in the Pacific Ocean to the west of Hawaii have a variety of political relationships with the United States and, partly as a result of this, have several different tiers of health care. Guam, the most developed of the islands in the western Pacific, has a relatively advanced system of health care. The Commonwealth of the Northern Marianas, however, provides a lesser tier of health facilities and care to its residents. The Republic of Belau and the Federated States of Micronesia have old hospitals and provide a generally poorer level of care than the other islands already noted (28).

Native Hawaiians. Native Hawaiians are individuals whose ancestors were natives of the Hawaiian Islands prior to initial contact with Europeans in 1778 (3,5). Although the 1778 Native population of the seven inhabited Hawaiian islands is estimated as 300,000, one century after European contact (i.e., in 1878), the Native Hawaiian population had declined by more than 80 percent, to 57,985 (29). During the past 200 years, Native Hawaiians have faced traumatic social changes, resulting in the loss of their traditions and threatening their survival as a distinct group. Most of this decline was due to venereal diseases (resulting in sterility), miscarriages, and epidemics such as small pox, measles, whooping cough, and influenza. Poor housing, inferior sanitation, hunger, malnutrition, alcohol, and tobacco use also contributed to the decline (29).

The political and economic transformation of Hawaii associated with statehood and with the development of a modern commercial/service economy has resulted in the loss of land and political power for Native Hawaiians (3). In the early 1900s, demands for labor to work in the expanding plantation economy, which could not be met locally, were satisfied by the immigration of more than 250,000 foreign laborers, most of them Japanese and Filipino. In later waves and smaller numbers, laborers also came to Hawaii from Portugal, Puerto Rico, Spain, and Korea.

As a result, the population of Hawaii today is multi-racial/ethnic with only an estimated 8,000 full-blooded Native Hawaiian descendants remaining (29). Native Hawaiians—today defined to include both "pure" Hawaiians and part-Hawaiians—own less than 1 percent of the Hawaiian islands, although they are attempting to regain their sovereignty over more of the state (5). Part Hawaiians, however, number more than 200,000, comprising a fifth of the islands' population, and are the fastest growing racial/ethnic group on Hawaii. Native Hawaiians are 13 percent of

the population and one of every three newborns on the Hawaiian islands (29).

Although 70 percent of Native Hawaiians reside in the West (i.e., the Mountain or Pacific states), more than a third of Native Hawaiians reside outside of the state of Hawaii (29). Nearly three-fifths (59 percent or 42,285) of the Native Hawaiian population on the mainland United States lives in the states of California, Oregon, and Washington. In addition, 12 states report 1,000 or more Native Hawaiians. Most statistics for Native Hawaiians, however, represent the two-thirds of the population resident in the state of Hawaii.

The health problems of Native Hawaiians today in large measure reflect their socioeconomic status. In 1990, more than 12 percent of Native Hawaiians lived in households with incomes less than $15,000, and these Native Hawaiians constituted 22 percent of all the individuals in the state of Hawaii in households with incomes at this level (29). In addition, although 6 percent of all families in Hawaii had incomes below the poverty level in 1989, 14 percent of all Native Hawaiian families had poverty level incomes (29). Median household income of $36,135 for Native Hawaiians, however, was close to the state median of $38,829 in 1989. Households headed by Native Hawaiian females and with no husband present had 1989 median income of $17,493, though, considerably below the state median (29). Thirty-five percent of these female household heads had incomes below the poverty level. Of the 77,900 recipients of government aid in Hawaii in 1990, 26 percent were Native Hawaiian, double their share of the state population (29). Of the Native Hawaiian recipients of government assistance, 73 percent received Aid to Families with Dependent Children (AFDC), the former version of the federal welfare program.

Poverty among Native Hawaiian women is associated with their labor market outcomes. Although Native Hawaiian women were 11 percent of the females in the civilian labor force, they were 15 percent of the unemployed females in the civilian labor force in 1991 (29). The 1991 unemployment rate for Native Hawaiian females of nearly 4 percent exceeds the statewide female unemployment rate of about 3 percent. In addition to often being unemployed, Native Hawaiians frequently are employed part time or are marginally self-employed in agriculture or fishing (3).

Many Native Hawaiians engage in high-risk behaviors, and the group as a whole has poorer health outcomes (such as a lower life expectancy) than other groups in Hawaii. In one study comparing whites, Japanese, Native Hawaiians, Filipinos, and Chinese in Hawaii, Native Hawaiians ranked highest in all the behavioral risk factors (not using seat belt, being overweight, smoking cigarettes, using alcohol, and driving while intoxicated) except physical inactivity (30). Although the National Health and Nutrition Examination Survey (NHANES) II reported that 27 percent of all U.S. adults 20 to 59 years of age were overweight in 1985, a study of residents of Hawaiian Homestead lands (allocated for long-term lease in individual parcels to persons with at least 50 percent Native Hawaiian ancestry) on the largely rural island of Molokai found that 65 percent of these Native Hawaiians ages 20 to 59 were overweight. Being overweight is defined as having a body mass index [weight/height^2] 20 percent or more above the average body mass index for whites. By this measure, Native Hawaiian females had a 50 percent greater prevalence of overweight than all U.S. females (31). Smoking rates among the Molokai Native Hawaiian females—34 percent reported being current smokers—also were slightly higher than the 31 percent share of United States females who reported that they were current smokers at that time. An additional 15 percent of the Molokai Native Hawaiian females indicated that they were past smokers.

Obesity is implicated in the high rates of diabetes among Native Hawaiians, especially those 35 years and older, who account for 44 percent of all cases reported in the state of Hawaii (29). Among Native Hawaiians in the Molokai Homestead study, evidence was found not only of diabetes but also of inadequate control for it, even among persons who knew that they had the condition (31). The levels of sugar measured in the blood and detected in the urine of Native Hawaiians known to have diabetes indicate poor control of this chronic disease.

As suggested by the evidence with diabetes, Native Hawaiians often enter medical treatment at late stages of diseases. They sometimes seek medical treatment only when self-care and traditional practices have not brought sufficient relief (3). This pattern shows up in the entry into prenatal care by Native Hawaiian women, who are 24 percent of the pregnant women on Hawaii (29). Although 60 percent of Native Hawaiian women began prenatal care in the first trimester in 1989 and 1990, this falls short of the 70 percent of all women in Hawaii who got care early in their pregnancies. More than one-third of the women who waited until the third trimester to seek prenatal care were Native Hawaiian women. In addition, 36 percent of those who received no prenatal care were Native Hawaiian mothers (29). Late or no prenatal care often is implicated in low birth weights among infants. In 1990,

Native Hawaiian newborns with low birthweight (less than 2,500 grams) were 25 percent of all infants born in Hawaii with low birth weight.

Heart disease and cancer are the major causes of death among Native Hawaiians, as among other populations in the United States. Hypertension, a major risk factor for both coronary heart disease and stroke, is a problem for Native Hawaiians of all ages (29). Even among Native Hawaiians between the ages of 6 and 18 years, the rate per 1,000 of 1.2 is double that for other ethnic groups in the state (0.6 per 1,000). Among Native Hawaiians ages 36 to 65, the rate per 1,000 of 197 exceeds the rate of 130 per 1,000 reported by the other racial/ethnic groups on Hawaii. The fact that the incidence of hypertension and heart disease among Native Hawaiians throughout the lifespan exceeds those among Hawaiians who are not natives suggests that the process underlying these diseases begins early in the lives of Native Hawaiians. To address this health problem, screening and prevention programs for circulatory diseases should be aimed at young Native Hawaiians (32).

Breast cancer is the most common cancer among Native Hawaiian females, with the peak incidence of all cancers occurring among 65-74 year olds. Cases of cancer among Native Hawaiian females younger than 45 years of age, however, comprise nearly a quarter of all cases among women on the islands (29). Because the perception of cancer in Hawaiian culture is bound up with beliefs about guilt and retribution, Native Hawaiian breast cancer patients often are fatalistic and do not vigorously fight their disease (33).

AIDS also affects Native Hawaiian females more than other females in Hawaii. Between 1980 and 1993, 12 cases of AIDS were reported among Native Hawaiian females, 40 percent of all AIDS cases reported among females in the state of Hawaii during that period. A third of all AIDS deaths among women during this period also occurred to Native Hawaiian women (29).

Efforts to modify behavior among Native Hawaiians and other Pacific Islanders and to improve their health are fraught with obstacles. For example, obesity is acceptable within Polynesian cultures where large body size is equated with power and respect (3). In addition, efforts from outsiders to bring about behavior changes are viewed by Native Hawaiians as infringements on their traditions, which value integration, balance, and continuity among person, nature, and the spiritual world. Changes may be resisted for this reason alone (5). For example, Native Hawaiian culture emphasizes the preservation of harmony, which sometimes results in the tendency for individuals to minimize the importance of events such as illnesses that may set them apart or reflect disharmony. This tendency results in delays in seeking services (3). Previous experiences with white and other non-Native people also have made Native Hawaiians suspicious of medical researchers and their advice (31). It may not be realistic to expect Native Hawaiians to give up high-risk behaviors without first solving the socioeconomic problems and cultural conflicts that contribute to these behaviors (3).

One way to address the cultural barriers related to delivering health care services to Native Hawaiian women would be to incorporate traditional cultural systems such as Ho'oponopono (a family conference that ensures understanding, harmony, and agreement). Because Native Hawaiian culture is focused on affiliation and close personal bonds to solve or cope with problems, Native Hawaiians are uncomfortable with impersonal bureaucracies and the reliance on expert authority within these systems (3). Respect for the importance of 'Ohana (family, or interdependence and mutual help and connectedness from the same root of origin) also is critical to developing effective health care delivery systems for Native Hawaiians (5). The Papa Ola Lokahi clinics of the Native Hawaiian Health Service are an example of community-based health care centers culturally sensitive to the needs of Native Hawaiians.

Other Pacific Islanders. Samoa, a group of volcanic islands in the southern Pacific Ocean about halfway between Honolulu and Sydney (Australia), is divided into two parts—the United States Territory of American Samoa and Western Samoa, which has been an independent country since 1962 (21). Most Samoans on U.S. soil, the second most populous native Pacific Islander group after Native Hawaiians, reside primarily in American Samoa, Hawaii, and California (26). More Samoans live on the U.S. mainland (nearly 48,000) than on American Samoa, although mainland residents maintain close ties to families in Samoa by visiting on ritual occasions and sending monthly remittances. Many return to the U.S. Territory of American Samoa to live permanently at some point (26).

Regardless of residence, though, Samoans show high rates of non-insulin dependent diabetes mellitus, with associated morbidity due to hypertension, renal failure, cardiovascular disease, blindness, and amputation (26). Samoans are among the most obese populations in the world, with Samoans in Hawaii and California even more obese than those in American Samoa (34). Hypertension also is a problem for adult Samoans, with 13 percent of Samoan women in Hawaii and 18 percent of Samoan women in California reporting this condition (34). Samoans born in the United States have an

increased prevalence of hypertension relative to Samoans born in American Samoa.

Average life expectancy at birth for Samoans is around 72 years, with Samoans sharing the major causes of death with other American subpopulations (26). In decreasing order of frequency, the major causes of death among adult Samoans are: heart disease, cancer, accidents, cerebrovascular disease, chronic obstructive pulmonary disease (and allied conditions), and influenza and pneumonia. Breast cancer accounted for 22 percent of cancer deaths, while cancers of the lung and bronchus were the causes of 19 percent of cancer deaths among Samoan women. Cervical cancer accounted for 8 percent of all female cancer deaths (26).

Access to health care among Samoans living on American Samoa is unique, in part because of the political relationship between the United States and its territory. Although this set of islands, located 240 miles southwest of Hawaii (the nearest site for tertiary care for residents of American Samoa), is medically underserved, American Samoa has operated a locally appropriate form of Medicaid since 1983 (26). All inpatient and most outpatient services are provided at the Lyndon Baines Johnson Tropical Medical Center (LBJ) in the village of Faga'alu on the island of Tutuila. For persons living in the urban areas of Tutuila, this aging facility built in 1968 is convenient; however, for persons in rural areas of Tutuila or on other islands within the United States Territory of American Samoa, it is difficult to access care. Financial access to services at LBJ is not a problem for the Samoan population because of the Medicaid program. However, other things, such as an insufficient number and scope of needed health professionals, the unavailability of sophisticated diagnostic tools, and the lack of financing to replace the aging and increasingly outdated medical center hinder the access to quality care in American Samoa (26).

Samoans living on the United States mainland are more likely to be poor than other Americans and also are less likely to hold higher paying jobs that provide insurance coverage for families (26). Twenty-five percent of all urban American Samoan families have incomes below the poverty level, compared to 10 percent of all white families. Poverty and low-wage jobs among Samoans are related to their lower levels of education. Samoan women complete high school at lower rates than other U.S. female populations (26).

Other barriers in access to health care for American Samoans result from their linguistic isolation, their culture and traditions, and their beliefs about the etiology of disease. Among groups on the U.S. mainland, urban American Samoans are one of the most linguistically isolated, as defined by the percentage of households that contain no persons who speak only English or that contain no persons who speak English "very well." Nearly two-thirds of Samoans on the U.S. mainland report that no one in their households age 14 years or older speaks only English, and nearly a third report that no one in their households age 14 or older speaks English "very well" (26,35). Linguistic isolation makes it difficult for Samoans to seek and receive appropriate health care. Samoan traditions as practiced in the U.S. Territory of American Samoa include a simple, close-knit way of life centered around the family (aiga), the chief (matai), the church, and the village. Although Samoans living in California, Hawaii, and Washington tend to live in similarly close-knit, well-defined communities and to establish close ties to their churches, only in Hawaii, where the Samoan community is visible and concentrated in three distinct areas (Laie, Kalihi, and Waianae), have community-centered clinics been developed to provide culturally appropriate health care and education (26).

Part of the difference in hypertension prevalence between Samoans in American Samoa and on the mainland United States has been attributed to the loss of the protective effect of the strong traditional social structure among older Samoans (36). The high rates of suicide among Samoans have been explained in a similar way. Some see the high Samoan suicide rates as a continuation of a "culturally sanctioned response to inescapable stressful situations" (37). Others see the suicides as the result of the conflict between traditional Samoan values and newly introduced values.

Finally, Samoan beliefs about the etiology of disease often constitute a barrier for them when seeking care. Samoans attribute disease states to such factors as too much work, too little sleep, the weather, certain foods, interpersonal frictions, or moral/religious issues. They thus often delay seeking care for conditions that are treatable or preventable.

Other Pacific Islanders, especially if living in urbanized/westernized areas, also report glucose intolerance or diabetes and have been identified as at risk for mental health problems (which may underlie suicide attempts). For example, 11 percent of urban Polynesian women (other than Native Hawaiians and Samoans) report diabetes, while in rural areas between 1 percent and 4 percent report the condition (31). Micronesians from Nauru, an affluent and relatively westernized place, have a 30 percent prevalence rate for diabetes, while Melanesians on Fiji report low rates—1 percent in the rural areas and 4 percent in the urban areas (31).

Hispanics

The earliest forebearers of the group known today as Hispanic Americans or Latinos were Spanish colonists in the late 1500s who came from Mexico to live in what is now the Southwestern United States. The descendants of these forebearers are included among "other Hispanics" and made up 7 percent of the more than 28 million Hispanics in the United States in 1996 (38,39,40). The other major Hispanic subgroups are Mexican Americans (64 percent), Central and South Americans (14 percent), Puerto Ricans (10 percent), and Cuban Americans (4 percent) (40). More than a third (36 percent) of all Hispanic Americans were foreign born, and 51 percent of the infants born to Hispanic women in 1992 were born to women who themselves were born outside the 50 states and Washington, DC (35,41). The nearly 14 million Hispanic women were about half of the total Hispanic population in 1996 (1).

More than 90 percent of the nation's Hispanic population is urban, with 58 percent living in the central cities of metropolitan areas (42,43). Seventy percent of the Hispanic population resides in six of the most populous states (California, Texas, New York, Florida, New Jersey, and Illinois), with the largest concentrations in four cities —New York City, Los Angeles, Chicago, and San Antonio (44,45). The South (34 percent) and the West (42 percent) combined are home to three-fourths of all Hispanics (43).

The Hispanic population in the United States is diverse by many measures. The population ranges from dark-skinned to light-skinned and includes all the shades in between; Hispanics include people who are admixtures with Indians, blacks, whites, and Asians (44,46). The Hispanic population includes 75 percent of all United States farmworkers, the laborers in this nation with a life expectancy of 49 years, infant mortality rates 25 percent higher than the United States average, and higher rates of cancers and reproductive disorders than the general population (47). Ten million people on both sides of the U.S.-Mexico border between California and Brownsville, Texas, are Hispanic, with many living in colonias, unincorporated areas often lacking septic tanks, sewers, and running water (48). Hispanics also include people from Spanish-speaking countries (such as certain parts of El Salvador and various regions of Mexico) whose primary language is not Spanish (49,50). Although median age for the Hispanic population is 26 years (compared to a median age of 34 years for the non-Hispanic United States population), this median includes Mexicans with a median age of 24, as well as Cubans whose median age is 43 years (40).

Among Hispanic subpopulations, Mexican Americans appear to enjoy better health than would be predicted, given their socioeconomic status and the fact that they have low utilization rates for health care services for both physical and mental conditions (51,52,53). Specifically, Mexican American women are less likely than Cuban, white, or black American women to have hypertension, despite their greater likelihood of being poor than either Cuban or white American women (54,55). Puerto Ricans and Cuban Americans, however, use health care facilities at rates comparable to whites. Puerto Rican women are less likely to be hypertensive and more likely to be poor than Mexican American women. In short, there is such variation in the health of the Hispanic American subgroups that looking at aggregated measures can obscure meaningful intragroup differences.

The socioeconomics and employment of Hispanics, as of all populations in the United States, influence their access to health insurance, and thereby to health care. In 1995, 30 percent of the U.S. Hispanic population had incomes below the poverty line (56). A third of Hispanic women had incomes below the poverty line that year as well. This third reflects the 43 percent of Puerto Rican females with poverty level incomes in 1995, along with the 34 percent of Mexican American females with similarly low incomes at that time (57). Twenty-seven percent of all Hispanic families had poverty level incomes, as did 19 percent of all Hispanic married-couple families.

Rates of unemployment and labor force participation account for the poverty levels of Hispanics in part. In 1993, the unemployment rate for the Hispanic origin population (both males and females) of 11 percent exceeded the unemployment rate for the non-Hispanic population of 6.6 percent overall, 7 percent for males and 6 percent for females (40). The 65 percent share of the Hispanic population in the labor force reflects both the 78 percent share for Hispanic males (which exceeds the 73 percent labor force participation rate for non-Hispanic males) and the 52 percent share for Hispanic females (which falls short of the 59 percent labor force participation rate for non-Hispanic females) (40). As with other measures, for Hispanics, there is variation by subgroup in unemployment and labor force participation rates. Unemployment rates for Mexican Americans and populations from Central and South America are near the Hispanic population average, while rates for Puerto Ricans are above and rates for Cubans and other Hispanics are below this level.

Hispanic households also are more likely than non-Hispanic white households to be headed by females; these female-headed households also are more likely to have incomes below the federal poverty line than

other types of households. Forty-four percent of Puerto Rican households are headed by women, as are 24 percent of Cuban households, and 19 percent of both Mexican American and Central and South American households (40). Although 34 percent of all non-Hispanic female-headed households had incomes below the poverty level in 1993, the corresponding share of Hispanic female-headed households was 52 percent. This 52 percent share includes the 61 percent of all female-headed Puerto Rican households with poverty level incomes, along with the 39 percent of female-headed Cuban households with comparably low incomes (40). Overall, nearly half (47 percent) of poor Hispanic families are female-headed and are likely to face the combined stresses of poverty, lack of health insurance, lack of health care for themselves and their children, and lack of social support (56). This arsenal of stressors places these women at risk for mental health problems as well as for substance and alcohol abuse. The lack of citizenship may be an added stressor for poor Hispanic women and may make them unwilling to use public clinics and other health facilities for fear of detection and deportation (58,59).

When Hispanic women are employed, they tend to hold jobs of low status and with low pay. Hispanics are more likely than other Americans to be among the working poor, with 17 percent of all Hispanics and 16 percent of Hispanic women reporting that they work but earn poverty level wages (56). Only 6 percent of all non-Hispanic people and 7 percent of non-Hispanic women reported working for poverty-level wages in 1995.

Partly as a reflection of this, 30 percent of the Hispanic population was not covered by health insurance in 1995 (57). Medicaid coverage of Hispanics with comparably low incomes varies by state of residence, as do eligibility requirements and administrative practices under this health insurance program for the poor. Hispanic residents of New York and California are more likely to be enrolled in Medicaid than are equally poor Hispanics in either Florida or Texas (48). Beyond the likely lack of employer-sponsored health insurance, the working poor face double jeopardy with respect to health care because they cannot afford to pay costly medical bills out-of-pocket and because they do not qualify for federal programs such as Medicaid. Some of the Hispanic working poor have the added disadvantage of lacking United States citizenship and thus are ineligible for federal health assistance programs, even if their incomes are low enough.

Although 54 percent of Hispanic women worked in 1995, half of them worked only part time (43). The major occupation of Hispanic women was technical, sales, and administrative support (39 percent), with the next largest share (28 percent) in service occupations (40). This pattern is replicated among Mexican American women and among women who are "Other Hispanic." However, managerial and professional occupations are the second leading category for both Cuban and Puerto Rican women. Hispanic women from Central and South America are most likely to have service occupations, followed by technical, sales, and administrative support occupations. The median earnings for Hispanic women (1993) of $10,631 falls short of the median earnings for non-Hispanic women ($14,346) by nearly $4,000 (40).

In addition, large proportions of Hispanic women work in the semiconductor and agriculture industries, both of which have occupational hazards (44). Workers in the semiconductor industry experience occupational illnesses at three times the rate of workers in other manufacturing industries. Agricultural workers are exposed to pesticides, the use of faulty equipment, and to a range of health problems such as dermatitis, musculoskeletal and soft-tissue problems, communicable diseases, and reproductive disorders, as well as health problems related to climate (44,60).

Along with socioeconomic status, cultural context or acculturation—the process of change that occurs as a result of continuous contact between cultural groups—plays a major role in the access of Hispanic populations to health care (61). More acculturated Hispanics (as reflected by greater use and skill with the English language, lessened contact with their homeland, and greater involvement with the Anglo American culture) would be expected to adopt behaviors and have health outcomes similar to the dominant Anglo culture (62). In cancer studies in Los Angeles, for example, Hispanics born in the United States, regardless of their socioeconomic status, appear to lose the low cancer risk associated with being born abroad and replace it with the higher cancer risk of their non-Hispanic Angeleno neighbors (46).

Less acculturated Hispanic immigrants, however, have a significantly lower likelihood of outpatient visits for health problems (both physical and mental). One example is the incidence of low-birth-weight infants (which is highly correlated with the infant mortality rate) among less acculturated, first-generation Mexican American women. Less acculturated, first-generation Mexican American women have a lower incidence of low-birth-weight infants (4 percent of live births) than white non-Hispanic women (6 percent of live births) and than second-generation Mexican American women (6 percent of live births) (63).

Similarly, immigrants from Mexico to the United States have been found to have lower lifetime prevalence of phobias, alcohol abuse or dependence, drug abuse or dependence, and major depression than native-born Mexican Americans (64). One possible explanation for this is that, even if equally poor, immigrants from Mexico may have less of a sense of deprivation than native-born Mexican Americans, and it is this sense of deprivation that contributes to the prevalence of psychiatric disorders. If immigrants have lower social status than their native-born counterparts, they may be less distressed (than the native-born) by their socioeconomic position because it far surpasses their standard of living in Mexico (64,65).

Hispanics, in general, are more obese, less physically active, and less likely to participate in lifestyles that promote cardiovascular health. As a consequence, they are more likely to have diabetes than the general U.S. population. The prevalence of diabetes among Mexican Americans is two to five times that among other racial/ethnic groups (66,67). In addition, the San Antonio Heart Study has shown that Mexican American diabetics are about six times as likely to have end-stage renal disease and three times as likely to have retinopathy as are non-Hispanic white diabetics (67).

Hispanics who are more acculturated tend to have less centralized body fatness than their less acculturated peers, however, and are, therefore, at lower risk for chronic diseases such as diabetes and heart disease. More acculturated Hispanics are likely to have intermarried with groups other than Indian populations, who have a high prevalence of obesity and associated health problems, and, thereby, to have altered their genetic material enough to reduce their risk factors for these diseases (68). The admixture of Indian genes has been found to be more prevalent in Mexican Americans of low socioeconomic status than in Mexican Americans of higher socioeconomic status. Coupled with the fact that Mexican Americans of low socioeconomic status are more likely to be obese and to have a less favorable distribution of body fat than other Hispanics, these findings partially explain the differentially greater prevalence of diabetes among Mexican Americans (67).

Another aspect of acculturation for the Hispanic American is encountering discrimination, prejudice, and exclusion (based either on language or skin color), perhaps for the first time, and incorporating into her or his identity a newly acquired "minority status." Experiences with discrimination and exclusion can frustrate expectations of improved socioeconomic status when the dominant culture's values are adopted (69). This may explain the fact that among more acculturated, younger Hispanic women, alcohol consumption has been found to be greater than among less acculturated, younger Hispanic women (70). When measured by language use and a series of sociodemographic variables (such as education, marital status, income, and employment), greater acculturation is found to be associated with the likelihood of being a drinker and with the frequency of consuming alcohol among Puerto Rican, Cuban, and Mexican American women (71). For example, better educated Mexican American women were more likely to be drinkers and to drink frequently than those with less education. However, Mexican American women living in poverty were less likely to be drinkers than those not living in poverty. This is true even though Mexican American women drinkers living in poverty consumed more drinks per occasion and were more likely to be heavy drinkers than women with higher incomes (71).

Highly acculturated Mexican Americans and Puerto Ricans, who are frustrated because they have not enjoyed access to the educational resources of the United States, are the most likely to report marijuana and cocaine use (72). Intravenous drug use, along with other high-risk health behaviors, is most prevalent among high-acculturated Hispanic women (73). In one study, 23 percent of high-acculturated Hispanic women reported intravenous drug use, while 4 percent of low-acculturated Hispanic women reported the same. Also varying with acculturation is the frequency with which Hispanic women have multiple sex partners, a high-risk behavior for sexually transmitted diseases and HIV infection/AIDS that affect disproportionately high percentages of Hispanic women. Only 13 percent of low-acculturated, but 31 percent of high-acculturated, Hispanic women reported having had more than one sexual partner within the past 6 months (73).

Other aspects of culture that can influence health are religion, folk healing, and "familism," or family mores. The health beliefs of many Hispanics relate to their views about God as the omnipotent creator of the universe, with personal behavior subject to God's judgment (62). Beliefs such as these make it difficult to establish the importance of preventive health behaviors and also can make it difficult for Hispanic women to leave abusive relationships. Sometimes religion gives Hispanic women the strength to leave, and, in other cases, it provides the guilt that keeps women in abusive relationships (58).

The reluctance of users of indigenous healers and folk medicines to disclose their use, and the associated delays in seeking biomedical care while using these treatments, also can jeopardize the health of

Hispanics (38). Family mores that dictate that Hispanics must seek the advice of family members before getting professional health care also can build delays into the care-seeking process that may be costly in terms of either morbidity or mortality (62,74). Thus, low utilization of health care services, including preventive tests such as the Pap smear and mammography, can result from cultural beliefs as well as from socioeconomic barriers (75).

Finally, HIV/AIDS, as it affects the Hispanic community, illustrates the many barriers to effective care that are socioeconomic, cultural, and political. Puerto Ricans, on the mainland United States and on the island of Puerto Rico, have the highest incidence of HIV/AIDS among Hispanics. They also have several characteristics that distinguish them from other Hispanic subgroups and may contribute to their high rates of infection (76). All Puerto Ricans have U.S. citizenship and therefore have no need to marry non-Puerto Ricans to maintain residency in the United States. Thus, Puerto Ricans marry each other in greater proportions than do other Hispanic subpopulations in the United States, and are, therefore, more likely to have sex with other Puerto Ricans than they are with non-Puerto Rican Hispanics or non-Hispanic people (76). This has contributed to the heterosexual spread of HIV/AIDS among Puerto Ricans, as has the existence of racially and ethnically homogeneous needle-sharing networks. The frequent and relatively cheap flights between New York City and Puerto Rico, and continuous work-related migration between the two, have added to the difficulty in counting and providing continuous care to Puerto Ricans diagnosed with HIV/AIDS.

Cultural factors influence the spread of HIV infection and AIDS among Hispanics because they often are unwilling to discuss intimate and emotional matters such as illness and sex unless they are able to speak to someone in Spanish. Low-acculturated Hispanic women, although less likely to engage in the high-risk behaviors through which they may contract HIV infection, may be at greater risk than their behavior would suggest because they may have little knowledge of their bodies and have little clout when it comes to negotiating condom use with their husbands or sexual partners (73). Educational programs to prevent HIV/AIDS, which instruct Hispanic women to encourage their sex partners who are intravenous drug users to use condoms, ignore the riskiness of speaking out for Latinas. Suggesting the use of a condom may cause her partner to believe that the Latina either knows too much about sex or is being unfaithful and may place her at risk of either physical or emotional abuse. Successful educational programs for poor Hispanic (and black) women have been difficult to establish, partly because these women need help in surviving in their daily environments before they can become receptive to skill-building and informational strategies (73).

Black Americans

The black population of the United States consists primarily of African Americans, although sizable numbers of African and African Caribbean immigrants have become part of this group in the last 15 years (77). The African ancestors of the group known today as African Americans were brought to the shores of what is now the United States as slaves by Europeans, beginning in 1619. Today, there are more than 32 million black Americans in this country, more than 12 percent of the total population, and they are currently the largest minority group (1). More than half of all black Americans (nearly 17 million) are females, and many are of mixed ancestry, including individuals with Caribbean, Indian, and European lineage (44). Approximately 5 percent of black Americans are foreign born, mainly French-speaking Haitians and other non-Spanish-speaking Caribbean people, some of whom are farmworkers in the United States (35). Though seldom studied, marked differences in acculturation exist among black women and contribute to the diversity of their health (73).

Black Americans are a largely urban population (87 percent of all black households in 1995) and can be found in all 50 states (43,77). In spite of their urbanity and their wider distribution among the United States states than other racial/ethnic groups, more than half of all black Americans live in these 13 Southern states —Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia (77).

Differences in the health of blacks and whites are many and varied. Blacks have more undetected diseases, higher disease and illness rates (from infectious conditions such as tuberculosis and sexually transmitted diseases), more chronic conditions (such as hypertension and diabetes), and shorter life expectancies than whites (78,79,80,81). Morbidity and mortality rates for blacks from many conditions (cancer, HIV/AIDS, pneumonia, and homicide) exceed those for whites (80,82). These findings exist even though black females are generally less likely than white females to report risk behaviors such as smoking cigarettes, consuming alcohol, or using other substances (79,83,84,85).

Explanations for racial differences in health outcomes have been sought by experts, and many contributing

factors have been identified. Although the interactive mechanisms have not been specified, three factors—genetics, poverty, and racism—generally are believed to have the greatest influence on the health of black Americans (78). These factors are discussed below.

The murkiness of race as a concept to define black Americans, who range from fair-skinned and blue-eyed with straight hair to dark-skinned with dark eyes and coarse hair, makes purely genetic explanations of the health differences between blacks and whites questionable. Biology appears to explain very little of the differences in health between blacks and whites if the proportion of excess deaths among blacks—that is, deaths that would not have occurred if blacks had the same age- and sex-related death rates as whites—due to hereditary conditions is examined. Less than 0.5 percent of black deaths have been attributed to hereditary conditions such as sickle cell anemia, for which genetic patterns have been established (86,87). On the other hand, researchers studying the prevalence of hypertension among blacks have found that it varies with skin color. That is, lighter-pigmented blacks often have a lower prevalence of hypertension than darker-skinned blacks, and pigment is related to the degree of admixture with whites, whose overall prevalence of hypertension is lower than that of blacks (88). One study found that darker-skinned individuals who identified with higher social class status were the most likely to have elevated blood pressures. Individuals with both light skin and high social status and with both dark skin and low social status reported lower blood pressure (87).

Instead of looking at population-related genetic differences, others link the racial differences in health to black subpopulations that are exposed to multiple risks—such as intravenous drug users, those living and working in hazardous environments, and the like. Environmental stressors that may increase obesity, for example, have been noted as contributors to the high prevalence of hypertension among black Americans (78). Those health conditions common among blacks that are considered to be genetic in origin are likely to receive more public attention and resources, however, than conditions that arise from behavior or life style choices. For example, conditions such as sickle cell anemia receive more research attention and public support than health conditions attributable to accidents, substance abuse, and environmentally caused illnesses (88).

Poverty affected 29 percent of all black Americans and nearly a third (32 percent) of all black women in 1995 (56). In addition, around two-fifths of black females both under 18 years of age (42 percent) and 75 years of age and older (38 percent) reported incomes below the poverty level. Single-parent, female-headed households, 47 percent of all black-family households in 1995, were mired in poverty to a greater degree than the entire black population (56). Forty-eight percent of all people in black female-headed families, but only 10 percent of all people in black married-couple families, had incomes below the poverty level in 1995. In addition, 80 percent of the more than 2 million black families in poverty were maintained by women with no husbands present (56). Median income for all black households in 1995 was nearly $22,400, with median household income for married-couple black families at nearly $41,400 (43). For female-headed family households, 1995 median income was nearly $15,600.

More than half of the black work force (52 percent) is female, with many of these workers earning poverty level wages. Although nearly 8 million black women (out of the total of 17 million black women) worked in 1995, one-sixth (nearly 17 percent) of them earned incomes at or below the federal poverty level (56). More than a fourth of all young black female workers ages 18-24 earned incomes at or below the poverty level.

The largest shares of employed black women—28 percent and 21 percent—have administrative support occupations (including clerical) and service occupations, respectively (89). Many of the black women in the work force—19 percent in 1993—held lower level, low-wage jobs in the health care sector. Black women held 20 percent of all jobs in nursing homes and 26 percent of all positions as nursing home aides (90). Black women also held about a fifth of all food service jobs (21 percent) and cleaning, building service, and laundry jobs (18 percent) in the health care sector.

Inadequate income carries over into other aspects of daily life that impinge upon health. These include inadequate housing (which may quicken the spread of communicable diseases), malnutrition, the stress of constantly struggling to make ends meet, dangerous jobs, and little or no preventive medical care (87). Malnutrition in little black girls may later result in low-birth-weight babies and high infant mortality rates when these girls become mothers. The high black infant mortality rate also has been related to the intergenerational effects of socioeconomic conditions on the growth and development of a mother from her prebirth to childhood, which may in turn influence the intrauterine growth of her child (91,92). Since many middle-class blacks are the first generation in their families to achieve that status, a black middle-class mother may be giving birth to an infant

whose health is markedly determined by maternal childhood poverty (86). An ongoing cohort study of middle-class black women that suggests an improvement in the incidence of low birth weights among infants born to subsequent generations of these women supports this explanation (93).

The stresses of constantly struggling to make ends meet also may translate directly into the finding that blacks living below the poverty level, many of whom work, have the highest rate of depression for any racial/ethnic group (94). Symptoms of depression have been found with greater frequency among black women ages 18-24 years than among white women (95). In addition, studies of the effect of employment on women have found that working outside the home can have harmful effects on both mental and physical health if associated with occupational hazards, heavy job demands, or poor social relations at work (96). Snapp (1992) has found that black professional/managerial workers report significantly lower levels of co-worker support than white professional/managerial workers, a finding that could place this group of women at risk of health problems (97).

Dangerous jobs may expose blacks to certain cancers to a much greater extent than whites (82,98). Black women are more likely than white women to work in hazardous jobs. Nearly 75 percent of the poultry plants in this nation—similar to the one that caught fire and killed 25 people in Hamlet, N.C., in 1991—are located in the South, in predominantly poor and black neighborhoods. The fire was fatal because locked safety doors prevented people from escaping. Two-thirds of the workforce at this plant (both males and females) was black (44).

Hazards in their living environments also detract from the health of black Americans. One of the first major studies to link race with environmental hazards was a 1983 study by the U.S. General Accounting Office that found that three of the four hazardous waste landfills in the Southeast were located in predominantly poor or black areas (47). A 1992 report by the Environmental Equity Workgroup at the Environmental Protection Agency (EPA) found both that blacks suffer higher rates of lung cancer and chronic obstructive pulmonary disease and that blacks have greater exposure to poor air quality in the environments in which they live and work. This report, however, did not make a causal connection between these findings. The share of black Americans living in EPA-designated air quality non-attainment areas exceeds that of whites for the following air pollutants—particulate matter, carbon monoxide, ozone, sulfur dioxide, and lead (99). More than three-fifths of blacks (62 percent) lived in non-attainment areas for ozone, while nearly half (46 percent) lived in non-attainment areas for carbon monoxide. Exposure to environmental lead (via air, water, soil/dust, and food) and the prevalence of high lead levels in the blood (greater than 15 μg/dl) also are most common among black Americans (relative to other racial/ethnic groups), but especially so among black children (99).

Exposure to hazards in the work and living environments suggests that black Americans might have a greater need than other groups for preventive health care. In reality, many blacks get little or no preventive care for a variety of reasons, including:

- parental ignorance of disease symptoms and when to seek medical care;
- lack of health insurance to enable access to health care;
- lack of neighborhood facilities in which to seek health care;
- persistent use of emergency rooms to treat chronic conditions, which are better managed in other settings; and
- racial discrimination encountered when seeking care (86,100).

Older black women are especially likely to report underusing both the Pap smear and mammography, the main screening technologies for cervical cancer and breast cancer, respectively (101). Lifetime risk for cervical cancer among black women is 2 per 100, more than double that for white women, and age-adjusted death rates for black women are more than 2.5 times that for whites (82,102,103). Estimated lifetime risk of developing breast cancer was 10 per 100 white women born in 1980 and 7 per 100 black women born that same year (102). However, significantly fewer black than white women survive five years after diagnosis with breast cancer (82).

Racial discrimination and racism have remained significant operative factors in the health and health care of blacks over time. From as early as 1867, black spokespersons concluded that racism was a major contributor to the poor health of black Americans in two significant ways. First, "structural racism" creates barriers to getting access to adequate care, and second, dealing with both structural barriers and racial insults may contribute to stress-related health problems such as pregnancy-induced hypertension among black women (104,105). Stress related to racism also may underlie the overeating and resultant obesity common in black women and may be associated with the more

than a twofold prevalence of hypertension and the more than fourfold prevalence of diabetes among black women relative to white women 18 to 30 years of age, one study found (106).

"John Henryism," defined as the behavioral predisposition to work hard and strive determinedly against the constraints of one's environment, has been advanced as one explanation for the black-white differences in hypertension rates. High blood pressure in blacks is a response to the incongruity between the social position one's work would typically merit and the position one actually occupies (107). Other research suggests that blood pressure becomes elevated among blacks in connection with racial discrimination at work, in reaction to movie scenes depicting angry and racist confrontations, and as an internalized response to racial discrimination and unfair treatment (108). A recent analysis of the relationship between self-reported experiences of racial discrimination and blood pressure among working class black men and women indicates that blood pressure is lower among those who reported they challenged unfair treatment than among those who accepted racial discrimination as an unalterable part of the fabric of United States society (108).

Another response to racism that affects the health of black women is the internalized rage of black men against their mistreatment, that too often is manifest in anger and violent behavior against black women (109,110). This violence has resulted in the highest reported spousal homicide rates among black women—more than 4 per 100,000 (111). Racism even influences the response of black women to domestic violence. They often are unwilling to call police, for fear that the police will brutalize the men who have battered them (58).

Racial discrimination has limited the access of blacks to higher incomes, improved health care, adequate housing, and better education—all of which are necessary to achieve modern levels of health and mortality (112). Racial discrimination probably "...exacerbates the mental health-damaging effects of poverty status among blacks" (98). Being black impinges upon health, even at higher income levels. A study of stress found its severity highest in lower-class blacks and lowest in middle-class whites. Even more notable is the fact that middle-class blacks and lower-class whites were found to have similar levels of stress (98).

Another example of what may be a psychophysiological response to racism is pregnancy outcome. Although there is a significant gap in mortality rates between the infants of all white and black mothers, there is an even greater gap between the infant mortality rates of white and black mothers of higher socioeconomic status (87). Mortality rates for infants born to college-educated black parents (from 1983 to 1985) were 90 percent higher than the rates among infants born to college-educated white parents. This excess mortality was due primarily to higher rates of death associated with premature delivery and low birth weights of black babies (92). Although the relationship with the father of a baby has been found to be critical to the early timing of prenatal care, and black women often do not live with the fathers of their unborn children while they are pregnant, differences in the use of prenatal care do not fully account for disparities between black and white women in the incidence of births of infants with low and very-low weights (59,91). Other factors such as the frequency of intervals of less than nine months between pregnancies (which is greater among black than white women) also have been associated with the greater incidence of low-weight infants born to black women. A complete explanation for this disparity is yet to be provided, however (113).

Immigrant black couples, when compared to native black couples, have a lower incidence of low-birth-weight babies. The incidence of low-birth-weight babies among immigrant blacks is similar to that among white couples. Black babies born in more segregated cities have higher rates of infant mortality than their counterparts born in less segregated cities, another suggestive finding that does not fully explain the differential incidence (105).

The impact on health of responses to racism can be seen by the high mortality rates for blacks from diseases such as cancer and HIV infection and AIDS. Black breast cancer patients have a worse prognosis overall, a worse prognosis at each stage, and are diagnosed at a more advanced stage than either Hispanic or white breast cancer patients (114). A greater incidence of more aggressive tumors could result in a later stage at diagnosis and the poorer survival rates that make breast cancer a disease with lower incidence but higher mortality among black than white women. Baquet et al. (1991) found a significant inverse relationship between socioeconomic status and the incidence of both cervical cancer and lung cancer, and attribute part of the elevated incidence of these cancers to the disproportionately low socioeconomic status of blacks (115). Blacks generally are less educated about the danger signs and more pessimistic about treatment for cancer than are whites. Both of these facts also contribute to making cancer the terminal disease many blacks conceive it to be (116).

It has been suggested that the experience of fighting HIV/AIDS is different for most whites than for minorities and the poor. For whites with HIV/AIDS, the fact that they have education and employment contributes to their sense of outrage about the disease and motivates them to fight for what is being lost. Blacks and members of other minority groups, who may never have had these advantages, do not have this sense of loss or the associated drive and the educational tools with which to fight against the loss. Delays in seeking medical care, differences in preexisting health, and differences in drugs administered as treatment generate a mean survival time of six months for blacks after diagnosis with HIV/AIDS, while whites have a mean survival time of 18 to 24 months (117).

Women represent a small but growing share of the cases of acquired immunodeficiency syndrome (AIDS) reported in the United States. In 1996, 20 percent of all AIDS cases reported were among women, a somewhat larger share than the nearly 15 percent of all AIDS cases (i.e., reported between 1981 and 1996) for which women accounted. Both cumulatively since 1981 (47,367 cases) and during 1996 (8,147 cases), black women reported the greatest number of cases of AIDS among women. Over these same periods, 20,026 cases and 2,888 cases, respectively, were reported among white women (118). Fifty-nine percent of all cases of AIDS reported among women in 1996 and 55 percent of all cases of AIDS reported among women between 1981 and 1996 were among black women.

Among black women during 1996, heterosexual contact (37 percent of cases) was the major source of infection by the human immunodeficiency virus (HIV) that causes AIDS. Injecting drug use was the cause of AIDS for half (47 percent) of all cases ever reported among black women, however. This dual pattern among causes of transmission is the same for white women, although among both Hispanic and Asian and Pacific Islander women, heterosexual contact is reported as the major cause of AIDS both in 1996 and since 1981 (118). Among American Indian/Alaska Native women, injecting drug use has consistently been the major reported cause of AIDS.

Research in both Los Angeles and in south Florida suggests that black women continue to engage in behaviors that place themselves at high risk of infection (73,119). Ten percent of the black women in the Los Angeles survey reported intravenous drug use in the past month, while 10 percent of the Florida sample indicated that their sexual partners were injecting drug users. More than half (53 percent) of the black women in the Florida survey reported that they had unprotected sex with their main partner, and one-fifth (20 percent) indicated they would not use a condom if their sexual partner were HIV-positive (119). Nearly a third of the black women in the Los Angeles survey reported having sex with multiple partners (73). Haitian women in Florida also reported unprotected sex with their main partner (71 percent) and that they would not use a condom with an HIV-positive partner (44 percent) (119). These high percentages of both black American and Haitian women who report that they would not use a condom with an HIV-positive partner may reflect the cultural realities these women face; they know that they are unable to override economic and gender role norms to engage in "safer" sexual intercourse.

Resentment by others at the unfair advantages presumably accorded blacks under affirmative action programs contributes to the sense of exclusion from and inequality in mainstream America felt by blacks, a sense that bears on them economically, socially, and physically. Even if poverty in America is reduced, as long as economic, social, and political inequalities persist, the health of black Americans is likely to remain impaired (98).

Asian Americans

Although health issues for Asian Americans and Pacific Islander Americans often are analyzed jointly, in this fact book the groups are separated. Native Pacific Islanders are considered Native Americans and are discussed with American Indians/Alaska Natives. (See discussion of Pacific Islanders in section on Native Americans.) Asian populations are discussed together. This change is made because native Pacific Islanders are only 5 percent of the Asian and Pacific Islander total and often have health outcomes more akin to those of American Indians/Alaska Natives than to Asian subpopulations. In addition, native Pacific Islanders are not immigrants to the United States as are Asian populations. Thus, an effort has been made throughout to disaggregate Asians from Pacific Islanders whenever possible, and to display data for the groups separately. Aggregate statistics for Asians and Pacific Islanders are used, however, when they are the best available.

Asian Americans are immigrants to the United States (and their descendants) from more than 20 countries who speak more than 100 different languages. They come from places such as China, India, Japan, the Philippines, Korea, Laos, Cambodia, Vietnam, and Thailand and represent more than 60 different ethnicities (22). In 1990, the largest subpopulations (in descending order) were persons of Chinese, Filipino, Japanese, Asian Indian, Korean, and Southeast Asian

ancestry. By the year 2000, Filipinos are projected to be the largest Asian subpopulation, followed by Chinese, Vietnamese, Korean, and Japanese Americans, in that order (120).

The numbers of Asians and Pacific Islanders in the United States (both males and females) have grown from 1.5 million in 1970 to more than 7.2 million in 1990, and more than 9 million in 1996, making them the fastest growing minority group in the United States. The 1990 Census counted 6.9 million persons of Asian ancestry and more than 365,000 Pacific Islanders among the 7.2 million population (21). Asian and Pacific Islanders are currently more than 3 percent of the total U.S. population and nearly 13 percent of all people of color (1). Asian and Pacific Islander women represent 13 percent of all women of color and 52 percent of all Asian and Pacific Islander Americans (1).

The majority of Asian Americans—more than 90 percent—reside in metropolitan centers. The states with the largest shares of Asian and Pacific Islander Americans are California, Hawaii, and Washington. More than 55 percent of all Asians and Pacific Islanders live in these three states, with the remainder living in New York, New Jersey, Illinois, and Texas (25). Among all the states, Asians and Pacific Islanders are the largest proportion of the population of Hawaii—62 percent (2). When growth of the Asian and Pacific Islander population by state is examined between 1980 and 1990, however, the five states with the largest increases—Rhode Island (246 percent), New Hampshire (219 percent), Georgia (210 percent), Wisconsin (195 percent), and Minnesota (194 percent)—are neither West Coast states nor states traditionally considered as homes for large numbers of Asians and Pacific Islanders (24).

Major Subpopulations

The varied histories of the many Asian subpopulations who have immigrated to the United States contribute to the wide, bipolar distribution in their socioeconomic positions and health. Most Asian immigrants have come to the United States since 1965, when the Supreme Court struck down immigration quotas based on national origin and when only about 1 million Asians were in the United States. Chinese immigration to this country, however, dates back to the mid-1800s. With the decline of the African slave trade and the discovery of gold, waves of mostly male Chinese were brought to the United States as cheap, docile laborers to work in the mines and on the railroads in the Western states. This new servant class became the new "negro" for the white majority and was even referred to as "nagurs" by some (121). Later labeled the "yellow peril," or disease-ridden and heathen, the Chinese were barred from entering the United States on the basis of race alone by the Chinese Exclusion Act of 1882. This ban remained in effect until 1943, and it was 1952 before immigrant Chinese were able to become U.S. citizens (23,122).

In the 1960-1985 period, the Chinese population of the United States quadrupled, and immigrants from more diverse ethnic and social strata came to the United States (23,122). Between 1980 and 1990, the Chinese American population doubled, mostly due to immigration; 63 percent of all Chinese Americans are foreign born (23). In 1990, more than 1.6 million persons of Chinese descent resided in the United States and constituted 23 percent of the Asian American population (123). Although Chinese Americans live throughout the United States, the largest concentrations are found in California (more than 700,000) and in New York state (more than 284,000) (124). Because Chinese Americans are diverse in class, occupation, and regional and linguistic background, in many Chinese American communities, unity is an elusive goal (25). Differences between foreign-born and American-born, urban residents and suburbanites, old timers and newcomers, northerners and southerners, Catholics and Protestants, Christians and Buddhists, professionals and laborers, and rich and poor frequently override a common ethnic identity (125).

The second largest Asian American subpopulation in the United States is Filipino Americans. Beginning with U.S. intervention in the Philippine Islands, Filipinos have migrated to both Hawaii and the mainland United States in three major waves (23). Between 1903 and 1910, a first wave of Filipinos came to the United States to attend educational institutions; a second wave migrated after World War II to work in agriculture in Hawaii and on the mainland United States. The third wave, consisting of fewer single men, more family groups, and more highly educated people, began after 1965 and continues today (25). Evidence of this third wave is the 81 percent increase in the Filipino population of the United States between 1980 and 1990. In 1990, Filipino Americans numbered 1.4 million and were 19 percent of the Asian American population (123). More than 64 percent of Filipino Americans are foreign born (23).

Immigration from Japan to both Hawaii and the mainland United States began in large numbers around 1885 and peaked between 1900 and 1910. The National Origins Act barred Japanese and other Asians from entering the United States after 1924 and contributed to the marked distinctions between the first-generation

Japanese Americans (Issei) and second (Nisei) and subsequent generations (23,25). Because first-generation Japanese Americans, many of whom were relocated and interned in prison camps in the United States during World War II, migrated to the United States when Japan had a single language without significant dialects, they have a stronger sense of nationalism than the immigrants constituting later generations (23). This sense of national identity among the Issei has been posited as the explanation for the strong identity among this particular group of immigrants. Today's Japanese American population of 847,562 (11 percent of all Asian Americans) resides primarily in California and Hawaii. More than 70 percent of all Japanese Americans were born in the United States.

The more than 800,000 Asian Indian Americans (11 percent of all Asian Americans) live primarily in the Eastern United States, although nearly 160,000 Asian Indians live in California (21,25,123). New York state is home to the second largest number (nearly 141,000) of Asian Indians. In 1992, the majority of births to Asian women in the states of Illinois (home to more than 64,000 Asian Indians) and New Jersey (home to more than 79,000 Asian Indians) were to Asian Indian women (35). Asian Indians have migrated to the United States in largest numbers since 1965, though some had come to the Western United States in the early 1900s, after initially migrating to British Columbia. Although they are of differing ethnic groups and backgrounds, most share a common tradition of non-western medical practice (Ayurvedic), and many are highly educated professionals (21,25).

Korean Americans, one of the most homogeneous Asian populations in terms of language, ethnicity, and culture, also are one of the fastest growing Asian subpopulations in the United States (21). Their population increased more than tenfold between 1970 (70,000 population) and 1990 (800,000 population) to make Korean Americans 11 percent of the current total U.S. Asian population (123,126). Korean Americans first migrated to the United States in response to unstable conditions such as drought, famine, and epidemics in their homeland in the late 1800s and early 1900s, which sent them to Hawaii and the United States mainland primarily as contract laborers (127). Others have migrated as a result of United States-Korean interaction during the Korean War (e.g., wives of servicemen; orphans adopted by Americans) (23). The Korean population of the United States more than doubled between 1980 and 1990, with most of the growth due to immigration; in 1990, more than 80 percent of all Korean Americans were foreign born. Post-1965 Korean immigrants tend to come to the United States as families, and most tend to be well educated.

Southeast Asians began to migrate to the United States primarily after 1975, as the conflicts in that region in Cambodia, Laos, and Vietnam were winding down. The majority of refugees of these conflicts to come to the United States were Vietnamese (66 percent), with Cambodians and Laotians each constituting roughly 20 percent of Southeast Asian immigrants (23). The earlier waves of refugees during the post-1975 period generally were better educated and wealthier than later arrivals, many of whom—especially Hmong (a Chinese-origin population that migrated to Laos and later to Thailand and the United States) and Laotians—were poor, illiterate, and not at all used to western culture at the time of their resettlement. The trauma of dislocation and resettlement is related to many of the health problems of these Asian subpopulations. About 615,000 Vietnamese, 149,000 Laotians, 147,000 Cambodians, and more than 90,000 Hmong resided in the United States in 1990 (23). Most Southeast Asians live in Western states, led by the 46 percent of Vietnamese and the 48 percent of Cambodians living in California (128,129).

Factors Affecting Health

The "model minority" image replaced the negative stereotypes applied to Chinese and other Asian Americans in 1966. Coming shortly after the 1965 Watts riots in Los Angeles, the identification of a model minority is viewed by some as an attempt to provide proof that the U.S. social system does work for minorities (24,121). However, Asians often are pitted against other minority groups and are made scapegoats by low-income whites and other minorities who indirectly blame Asians for their failure to succeed and claim that Asians take away their educational and job opportunities. The "model minority" epithet has direct implications for the health and economic status of Asian Americans. It tends to trivialize the health problems of Asians, suggesting that they can take care of these problems on their own and overlooks the diversity among Asians and the problems faced by some of the newest refugees (130).

The health problems of Asian Americans are worsened by a complex set of cultural, linguistic, structural, and financial barriers to care. In 1980, a language other than English was spoken at home by nine out of 10 Asian Americans who were 5 years of age or older (131). In 1992, 42 percent of the Vietnamese American population 5 years of age and older lived

in a linguistically isolated household—that is, a household in which no person age 14 years and older speaks only English, and no person age 14 years and older, who speaks a language other than English, also speaks English "very well" (35). Nearly three-fifths of Asian Americans are foreign-born, and, in 1992, only 17 percent of all Asian mothers who gave birth in the United States had been born in the United States (35). If residing illegally in the United States, Asian Americans may not seek out medical care for fear that this will expose their illegal status and result in deportation.

Since many Asians are unable to communicate in English, they are not readily employable. When employed, it is often in small businesses or sweatshop-type factories with unsafe and unhealthy working conditions and no fringe benefits such as health insurance. Three-fifths of all Asian and Pacific Islander women were in the labor force in 1990, with more than a fifth (22 percent) employed in administrative occupations. One-sixth (17 percent) of Asian and Pacific Islander females had professional specialty occupations, while an additional 16 percent had service occupations (132).

Although only 15 percent of all Asians and Pacific Islanders and only 29 percent of all households headed by Asian and Pacific Islander females reported incomes below the federal poverty level in 1995, these averages mask considerable variation among subpopulations (133). For example, the percentage of the population below the poverty level ranged from a low of 6 percent among Japanese Americans to a high of 66 percent among Laotians in 1990 (compared to about 13 percent for the entire U.S. population) (37). The proportion of Vietnamese families reporting incomes below the poverty level in 1990 (24 percent) was more than three times as great as that for Asian Indian families (7 percent) (35). Hmong and Cambodian Americans reported poverty levels above 45 percent (23).

Both household and individual incomes for Asian Americans support the finding of disparate poverty rates among the subpopulations. In 1980, Asian Americans had average household income of $6,900, less than the United States average of $7,400. At that time, only Indonesian, Chinese, and Japanese Americans had average per capita incomes above the U.S. average (23). In 1990, the median family income for Asian and Pacific Islanders was $35,900 (higher than the $35,000 median family income for non-Hispanic white Americans), and 37 percent of all Asian and Pacific Islander American households had annual incomes of at least $50,000. At the same time, more than 5 percent of Asian and Pacific Islander households had incomes of less than $5,000, and nearly 12 percent had incomes of less than $10,000 (134). The resettlement of more than 1 million Indochinese refugees in the 1970s and 1980s made the bimodal distribution even more pronounced because refugees arriving after 1979 have experienced higher rates of unemployment, underemployment, and poverty than other Asian Americans, and other minorities (37). For example, in 1980, unemployment among the Hmong (20 percent), Laotians (15 percent), and Cambodians (11 percent) all exceeded the U.S. average (23).

Health insurance coverage varies among Asian American women, as do employment and income levels. Eighty-one percent of all Asian and Pacific Islander women and 91 percent of Asian and Pacific Islander women ages 65 years and older reported having either private or public health insurance coverage in 1995 (133). Fourteen percent of Asian and Pacific Islander women reported Medicaid coverage and nearly 7 percent reported Medicare coverage. Nearly two-thirds (66 percent) of Asian and Pacific Islander women had private health insurance. Despite high rates of coverage in general, selected subpopulations of Asians lack health insurance, and this lack of health insurance causes some Asian American women to become frequent users of hospital emergency rooms. One study of Korean American residents in Los Angeles County found that 50 percent of those under 65 years of age and 45 percent of those 65 year of age and older had no health insurance (135).

Although Asian American women overall exhibit healthful lifestyle behaviors, such as a lower smoking prevalence (10 percent) than among other American women (25 percent), there is variation by subpopulation in both healthful behaviors and the prevalence of illness (24). For example, this 10 percent overall smoking prevalence aggregates higher rates among Japanese American (19 percent of whom reported smoking in one California study) and Filipino American (11 percent of whom reported smoking in the same study) with the lower rates of Chinese women (7 percent of whom reported smoking in the California study) (136).

The risk of hypertension also varies by subpopulation. In another study of the California population, hypertension was found to be more of a problem for Filipino Americans (25 percent) than for either Chinese (16 percent) or Japanese (13 percent) Americans (128). Only 9 percent of Vietnamese females in California reported hypertension compared to 16 percent of all females in the state population. The lowest hypertension rate was reported among Korean American

females in California, only 3 percent of whom reported the condition (128).

Other conditions, such as tuberculosis, are more common among Asian populations than among other racial/ethnic groups. The prevalence of tuberculosis among Asian Americans, the highest among all groups, is nearly 4 times that among the general population (24,137). Hepatitis B and certain genetic abnormalities also are more common among Asian subpopulations.

The lack of knowledge of risk factors or preventive behaviors for various diseases also is a problem for Asian Americans. One study among Southeast Asian populations in central Ohio revealed that 94 percent of those surveyed did not know what blood pressure is, and 85 percent did not know what could be done to prevent heart disease (128). The lack of knowledge about cancer risk factors, for example, results in the failure to conduct breast self-examinations or to get screening such as mammography or Pap smears to lessen the incidence of breast or cervical cancer (24).

The failure of Asian women to get regular screenings relates not only to a lack of knowledge of risk factors but also to the belief that cancer is inevitably fatal. One survey of Vietnamese women in San Francisco found that more than half (52 percent) believed "there is little one can do to prevent cancer" (138). Although virtually all of the women surveyed (97 percent) had heard of cancer, many did not know common signs, symptoms, and risk factors for either breast or cervical cancer. Vietnamese women who have migrated to the United States more recently (post 1981) were more likely (76 percent) to have never had the Papanicolaou test for cervical cancer than women who had migrated before 1981 (33 percent) (138). In a survey of Vietnamese women in western Massachusetts, just over 50 percent of respondents reported having had the Pap test, less than the 57 percent of all U.S. women 18 years and older who reported having had this test in 1991 (139,140).

The failure to get mammograms is of particular concern because of the gradual increase in breast cancer rates among Asian women (especially Chinese, Japanese, and Filipino) over the generations after their migration to the United States, when compared to these same groups of women in Asia. Overall, Asian American women born in the United States have a breast cancer risk 60 percent higher than Asian American women born in Asia (141).

Prenatal care is another form of preventive care that many Asian American women do not receive. Nearly half of Cambodian and Laotian American women do not begin prenatal care during their first trimester and have higher risk births because of this (137,142). Of the five major Indochinese groups in Oregon (Khmer, Hmong, Mien, other Lao, and Vietnamese), Hmong American women had the least favorable birth risk profile (142). Mean birth weight among Hmong infants born in California between 1985 and 1988 was significantly lower than mean birth weight among white infants (143). The preterm and low-weight infants born to Hmong, Cambodian, and Laotian mothers in 1992 are reflected in the aggregate rates of 12 percent (preterm) and 7 percent (low birth weight) for births to all women in the category "Remaining Asian or Pacific Islander Total." These rates are higher than for Vietnamese mothers (10 percent preterm and 6 percent low birth weight), and also higher than for white non-Hispanic mothers (8 percent preterm and 5 percent low birth weight) (35).

Even with health insurance, culturally accepted medical models such as acupuncture and herbal medicines often are not covered services, a fact that further limits access to health care (36). Asian American women are more likely to report using traditional health practices and medicines than Asian men—69 percent versus 39 percent. By ethnic group, nearly all Cambodian women (96 percent), nearly a fifth (18 percent) of Laotian women, and nearly two-thirds of Chinese women (64 percent) report using traditional health practices (144). High non-compliance with western prescription medications among these populations clearly becomes a concern. Non-English-speaking Chinese hypertensives, for example, exhibit such non-compliance, perhaps in deference to traditional treatments (24).

Fear of difficulties in communicating—compounded by shame, guilt, anger, depression, and other responses to certain stigmatized conditions such as mental retardation, substance abuse, and HIV/AIDS—also may deter Asian Americans from seeking care promptly (37). Chinese Americans in particular have been documented to underuse mental health services (145). The traumas due to war (e.g., torture, starvation, rape, forced labor, and witnessing murder), leaving one's homeland, and resettling in another land often result in unique medical conditions, such as the psychosomatic or non-organic blindness reported among Cambodian women 40 years of age and older. Even if Asian American patients seek care, language barriers make conditions such as this difficult to diagnose and treat (129). To compound their stresses and trauma, many poor Southeast Asian immigrants resettle in violent, inner-city environments in the United States (146). Depression is also found among Korean Americans, most of whom are recent

immigrants but who migrated to the United States without war-related trauma; this mental health problem is more common among Korean Americans than it is among either Chinese, Japanese, or Filipino Americans (126).

In addition, not all English medical/health terminology can be readily translated into the various Southeast Asian languages, nor can many Southeast Asian expressions describing physical and mental conditions be directly translated for U.S. health care providers. Cancer, for example, has a counterpart in Cantonese (the word nham, which loosely translates into English as "growth") but is not mentioned as a disease in texts on Chinese medicine. Thus, it may be difficult for Asian patients to accept their diagnoses as real or to accept western treatment regimens for them (124).

If Asian Americans get to health care providers and translators are available, communication still is not guaranteed and appropriate care still may not be received (147). For example, differences between the medical systems in the United States and China constitute a further deterrent to Chinese Americans born in China but in need of health care in the United States. In China, physicians generally prescribe and dispense medication, charging only a nominal fee for their services; the major cost for the visit is the medications (124). Because the idea of a visit to a medical professional for a checkup without getting prescriptions for medications does not live up to the expectations of many Chinese Americans, they are reluctant to make visits for routine or preventive care. In addition, 90 percent of the obstetricians and gynecologists in China are female, a fact that makes it very difficult for foreign-born Chinese American women to be examined by or receive care from the predominantly male practitioners in these medical specialties in the United States (124).

Some Korean American women, many of whom have extreme difficulty with English, report using han yak, a Korean medicine, and other over-the-counter Korean home remedies rather than going to physicians in the United States (137). They avoid going to physicians because of "communication difficulties," "impatient" doctors and nurses, being "treated disrespectfully" because of their ethnicity, and other "bad experiences" (137).

Other cultural characteristics that influence the health of Asian Americans are familism, reverence for authority, and a sense of shame/pride. Asian cultures—like Hispanic cultures—often emphasize family decisionmaking. The practice of family decisionmaking may be heightened by necessity, or it may be rendered impotent within the socioeconomic context of U.S. society (135). The reverence for authority common in Asian societies with hierarchical structures, such as in Korea, for example, may result in a Korean American patient not questioning a physician's diagnosis and treatment and indicating understanding, agreement, and compliance when there is none (37). This reverence for authority also may combine with gender role differentiation to make Asian women reluctant to report domestic violence to either health providers or law enforcement authorities (146,148).

The strong desire to "keep up appearances" within the community has resulted in low utilization of addiction treatment services for alcoholism and substance abuse by Asian Americans. Although little research has been done on either alcohol or substance abuse among Asian American women, available research suggests that Asians use and abuse alcohol and other substances less frequently than members of other racial/ethnic groups (120). Low drinking rates among all Asian American groups seem to be due to high percentages of abstainers among the foreign-born populations (120).

One study of Asian Americans in Los Angeles found that among women, Japanese Americans were the most likely to report being drinkers (73 percent), followed by Chinese (49 percent), and Koreans (25 percent) (149). High rates of alcohol consumption also have been noted among persons with one Asian and one Caucasian parent (85). Filipino women are least likely to report the use of alcoholic beverages. Alcohol use among Asian American women tends to increase with acculturation. In addition, stressors such as divorce and widowhood are associated with both depression and substance abuse for these women (85). Although risk factors for and patterns of substance use and abuse have been identified among selected Asian youth populations, prevalence is generally lower than among youth of other racial/ethnic groups (120).

The vast differences between Asian societies and the United States mean that the most basic economic and socio-emotional needs of new immigrants may not be met by existing institutions. The painful process of acculturation produces high levels of stress and may produce a high prevalence of mental illness among Asian Americans (94). Some of this mental illness results from frustration at not reaping benefits in the form of high-paying, high-status jobs, commensurate with their expectations based on the level of education attained and the benefits reaped by white Americans with comparable education (150). Gender stereotyping of Asian women as docile and subservient also constitutes a stressor that may contribute to depression and mental illness (151). The

major mental health problem for Asian Americans, though, is racism—which adversely affects their psychoeconomic status, as well as the status of other peoples of color (36).

Adolescent Females of Color

Although differing ages are used to define adolescence, if one considers the population between 10 and 19 years of age as adolescents, nearly 35 million people were members of this group in 1990 (152). Adolescents were 14 percent of the 1990 U.S. population, with their number and population share both expected to decline in the future (152,153). Adolescents often live in single-parent families (26 percent), and many live in poverty (20 percent). Fifty-four percent of the youth in single-parent families live in poverty (153). As for adults, living in poverty plays a critical role in access to health care services and in shaping health outcomes for adolescents.

At the same time that the total adolescent population is projected to decline in the near future, the representation of adolescents of color among this population is expected to increase. Adolescents were 18 percent of the 1990 populations of American Indians/Alaska Natives, Native Hawaiians, Hispanics, and blacks; they were 16 percent of the 1990 Asian American population (152,153). By the year 2000, it is estimated that 31 percent of the adolescent population will belong to a racial/ethnic minority group, with this share reaching 40 percent by the year 2020 (153).

Female American Indian/Alaska Native adolescents were 18 percent of all female American Indians/Alaska Natives and were slightly less than half of all American Indians/Alaska Natives ages 10 to 19 (152). Half of all American Indian/Alaska Native adolescents live in poor or near-poor families (153). Native Hawaiian adolescent females were similarly about 18 percent of the total population of Native Hawaiian females. Approximately 43 percent of the Hispanic population is under the age 19, with female Hispanic adolescents 48 percent of all adolescents (152,153). The Hispanic adolescent population is projected to increase by 42 percent by the year 2000, when Hispanic youth will be 12 percent of the total adolescent population (153).

Currently a third (32 percent) of the black population is under the age of 18 (152,153). Sixteen percent of all black females are adolescents, and the number of all black adolescents is expected to increase by 17 percent by the year 2000. More than two-fifths (43 percent) of black adolescents live in poverty, with an even greater share (two-thirds) living in single-parent homes (153). In recent years, Asian Americans have constituted nearly half of all immigrants to the United States, with foreign-born adolescents more than half of this immigrant stream. Approximately one-third of Asian Americans are under the age of 17 (152,153). Fifteen percent of all Asian American females are adolescents, and about half (49 percent) of all Asian American adolescents are females.

Access to Services

Adolescents have among the lowest rates of physician contact among all age groups in the United States, and many adolescents of color have even lower rates of contact (153,154). Although white youths ages 12 to 17 in 1988 reported 3.6 contacts with a physician during the past year, black, Hispanic, and Asian and Pacific Islander youth reported fewer (2.4, 2.4, and 1.0, respectively) (154). American Indian/Alaska Native adolescents reported 7.0 physician contacts during the past year.

Data on the share of youth ages 12 to 17 who reported in 1988 that they had not received routine care in the past two years are consistent with the frequencies of physician contact. More than a fifth of white (22 percent) and black (21 percent) youth reported receiving no routine care in the past two years, while at least a quarter of Hispanic (25 percent) and American Indian/Alaska Native youth (27 percent) reported the same. Nearly a third of Asian and Pacific Islander youth (31 percent) indicated they had not received routine care in the past two years (154). In a 1989 survey of American Indian/Alaska Native adolescents, 54 percent of the males and females combined reported having a physical and a hearing examination within the last two years (155).

The lack of a regular source for routine medical care and the lack of a particular provider for sick care also are problems for adolescents of color. While about an eighth of white (13 percent), black (13 percent), and American Indian/Alaska Native (13 percent) youth reported having no regular source for routine medical care in 1988, more than a fifth of Asian and Pacific Islander youth (21 percent) and nearly a fourth of Hispanic youth (24 percent) reported this (154). The shares of racial/ethnic minority adolescents with no particular provider for sick care were even greater than the shares lacking a regular source for routine medical care. Close to a fifth of white youth ages 12 to 17 (18 percent), but nearly two-fifths (38 percent) of Hispanic youth, reported no particular provider for sick care. Around a third of the other adolescents of color (blacks, Asian and Pacific Islanders, and American Indians/Alaska Natives) reported this same lack of a provider (154).

Health insurance and the coverage of adolescents under family policies are key to the use of services and access to care for teens and partially explain the findings noted above. Approximately 74 percent of all adolescents are covered by private health insurance. Some sources indicate that more than half of black and Hispanic adolescents and two-thirds of other adolescents of color have private health insurance (153). For many youth of color, however, public health insurance, generally Medicaid, provides the pathway to health care services and may provide only limited access to the full range of needed services. Twenty-eight percent of black adolescents, 14 percent of Hispanic adolescents, and 13 percent of other youth of color are estimated to have Medicaid or other public health insurance (153). Sizable percentages of minority adolescents report having no health insurance, however, ranging from 12 percent of Asian and Pacific Islander adolescents to 41 percent of American Indian/Alaska Native youth (154). Thirteen percent of white adolescents report no health insurance, as well as 18 percent of black and 28 percent of Hispanic youth.

Although the lack of health insurance and family poverty often constitute insurmountable barriers to adolescents in need of health care services, nonfinancial barriers also interfere with the ability of adolescents to get care and contribute to limited frequency of contact and the lack of relationships with providers. Services often are fragmented and do not address the specific needs of adolescents. Depending on the location of facilities, getting there sometimes is problematic. Issues of client-provider confidentiality vis-á-vis parents also serve as barriers to adolescents who might otherwise seek care. Real or imagined fears about one's reputation or about disapproval by the provider, family, or peers may keep adolescents away from needed health services as well (153).

Health

The parents of black, American Indian/Alaska Native, and Hispanic youth ages 12 to 17 in 1988 were less likely to rate the health of these adolescents as excellent than the parents of white and Asian and Pacific Islander youth the same ages (154). More than half (54 percent) of white adolescents and more than three-fifths (63 percent) of Asian and Pacific Islander adolescents were rated in excellent health with no limiting conditions. Only a fourth (25 percent) of American Indian/Alaska Native youth but around two-fifths of black (39 percent) and Hispanic (43 percent) youth were rated similarly. A minuscule proportion (0.8 percent) of the parents of Asian and Pacific Islander youth ages 12 to 17 rated their offspring in fair to poor health or with limiting conditions (154). The shares of white (9 percent), American Indian/Alaska Native (8 percent), and Hispanic (10 percent) youth rated fair to poor were considerably higher, as was the nearly 12 percent of black adolescents whose parents rated their health as fair or poor. A 1989 survey of American Indian/Alaska Native teens found them three times as likely as white teens to rate their health poor (155).

Most of the data on the health of adolescents is on their high-risk behaviors, such as unprotected sexual intercourse, alcohol use, and substance abuse, which are discussed in the following section. Limited information on the health of adolescent females of color suggests, however, that their life circumstances and the low self-esteem that often emanates from these circumstances, contribute to greater reporting of depression and suicide attempts than among their white counterparts. Data from the 1995 Youth Risk Behavior Surveillance System (YRBSS) for white, black, and Hispanic adolescent females support this contention to some extent (156). Although a slightly larger share of Hispanic (34 percent) than of white (32 percent) female youths (high school students) reported having thought seriously about attempting suicide during the 12 months preceding the survey, a smaller share of black females (22 percent) reported similar thoughts. Consistent with reported suicide ideation, a fifth of adolescent Hispanic females (21 percent) attempted suicide at least once during the 12 months preceding the 1995 survey, while 11 percent and 10 percent of black and white adolescent females, respectively, reported attempts (156). More than a fifth (22 percent) of American Indian/Alaska Native adolescent females reported in a 1989 survey that they had ever attempted suicide (155).

Other studies have shown that black adolescent females tend to report depressive symptoms at higher rates than white adolescent females and that lower socioeconomic status accentuates this finding (153). Rates for completed suicide among black adolescent females remain lower than rates for white adolescent females, although rates among these young black women have increased in recent years. Female Mexican American adolescents have been noted to indicate more depressive symptoms than either their black or white counterparts (153). In addition, in one study, Hispanic adolescent females were found to account for 25 percent of all adolescent patients admitted to the hospital for suicidal behavior, a far greater share than expected based on their population share (153).

Although information is spotty for Asian and Pacific Islander adolescents, their age-adjusted rate of commitments to psychiatric hospitals is about half that for white youth (153). This at first seems surprising in light of the high depression scores reported for adolescent Asian refugees. However, when taken in the context of many Asian cultures, in which seeking mental health care violates norms about family interactions and may be viewed as a source of shame to a family, this finding seems more believable. Perhaps partly as a result of this underutilization of mental health services, suicide accounts for a much larger proportion of deaths among Asian American youths than among white adolescents.

The overall prevalence of mental health problems among American Indian/Alaska Native youth appears to be similar to that of white adolescents, although there has been a recent increase in problems in early adolescence among American Indian/Alaska Native youth (153). Eating and weight-related disorders are increasing among American Indian/Alaska Native youth, and, according to the Indian Adolescent Health Survey, 20 percent of females had attempted suicide, an attempt rate more than double that for white youth. Major risk factors identified for suicide attempts among American Indian/Alaska Native adolescents include: female gender; poor self-perception of health; knowledge of a suicide attempt by a friend or family member; a history of mental and behavioral problems requiring professional help; and extreme alienation from family and community (5,157). The completed suicide rate for American Indian/Alaska Native youth is more than twice the rate for white adolescents, and, in contrast to the national pattern, suicide is more likely to occur among younger adolescents than older ones.

Health Risk Behaviors

Most of the behaviors discussed below can place adolescents at risk of unhealthful outcomes. Unprotected sexual intercourse, substance use or abuse, and operating a motor vehicle in an unsafe manner all can result either in morbidity or death. Sound nutrition practices and regular physical activity, two health enhancing behaviors, also are discussed for adolescent females of color. Because most of the information both on health-risk and healthful behaviors is gathered in surveys administered to students in junior high and high schools, these figures may perhaps best be thought of as underestimates of high-risk and overestimates of healthful behaviors among youth, if one accepts the notion that high-risk behaviors are more prevalent among out-of-school youth than among youth who remain in school (158). Since dropout rates are higher among minority youth than among white adolescents, the figures discussed below may well underestimate the health risk behaviors among minority youth.

Sexual Intercourse. Sexual intercourse can place adolescent females of color at risk for sexually transmitted diseases, HIV infection/AIDS, and pregnancy during years when their bodies are still developing and are, therefore, exceptionally vulnerable to such assaults. Adolescent females of color too often have low self-esteem and use their fertility to seek approval from the males with whom they have intercourse. In the 1995 YRBSS, one-half or more of all white, black, and Hispanic female high school students (grades 9 through 12) reported having had sexual intercourse. Forty-nine percent of white and 53 percent of Hispanic adolescent females, along with more than two-thirds (67 percent) of black adolescent females, reported having ever had sexual intercourse (156). In a 1989 survey of American Indian/Alaska Native teens, 57 percent of the females queried reported having had sexual intercourse by the time they were in the 12th grade, with the average age of first intercourse reported to be 14 years (155). A tenth of all black adolescent females in YRBSS reported that they first had sexual intercourse before age 13; an even larger share (22 percent) indicated that they had engaged in sex with four or more partners so far. Smaller shares of Hispanic and white adolescent females reported both having sexual intercourse before age 13 (5 percent of Hispanics and 4 percent of whites) and having had four sexual partners (12 percent of both Hispanics and whites).

Although the largest share of black adolescent females (51 percent) reported currently being sexually active, nearly two-fifths of both white (39 percent) and Hispanic (39 percent) adolescent females also reported current sexual activity. Among currently sexually active adolescent females, a larger percentage of blacks (61 percent) than either of whites (48 percent) or Hispanics (33 percent) reported condom use during last sexual intercourse (156). Birth control use before last sexual intercourse was more common among white adolescent females (25 percent) than among either blacks (12 percent) or Hispanics (9 percent).

As a result of unprotected or inadequately protected sexual intercourse, adolescent females of color often become mothers. Adolescent childbearing is twice as common among American Indian/Alaska Native females as it is among females of all races combined, with 42 percent of all American Indian/Alaska Native mothers

being under age 20 when they had their first child (159). Among Native Hawaiian, Samoan, and Guamanian women, sizable shares of the births in 1992 also were to females less than age 20; 18 percent of births to Native Hawaiian mothers, 11 percent of births to Samoan mothers, and 16 percent of births to Guamanian mothers were to women less than 20 years of age (35). The racial/ethnic group with the smallest share of births to females younger than 20 years of age is Asian Americans. Births to females younger than 20 years of age range from less than 1 percent among Chinese adolescents to 6 percent among both Filipino and Vietnamese adolescents (35).

High rates of teen pregnancy also are found among young Hispanic and black women. In 1994, the birth rate for Hispanic females ages 15-17 years was 74 per 1,000 women, more than three times the rate of 23 per 1,000 women for non-Hispanic white females the same age (160). Among 18- to 19-year-old Hispanic females, the birth rate of 158 per 1,000 women was more than double the rate of 67 per 1,000 non-Hispanic white females. Teen pregnancy rates among black adolescent females are comparable to rates among Hispanic adolescent females, with the rates for blacks at 76 per 1,000 females ages 15-17 and 148 per 1,000 females ages 18-19 (160).

Substance Abuse. The use by adolescent females of substances such as cigarettes, smokeless tobacco, alcohol, marijuana, and cocaine or crack cocaine, can negatively influence present and future health. Large majorities of white (71 percent), black (63 percent), and Hispanic (75 percent) adolescent females reported in 1995 that they had tried cigarette smoking, even if only one or two puffs were taken (156). Smaller shares reported current cigarette use (defined as smoking on one or more occasions during the past 30 days) both in 1985-1989 and in 1995, although the proportions varied considerably by racial/ethnic group. American Indian/Alaska Native high school seniors in 1985-1989 were the most likely to report current smoking (44 percent), followed by white females (34 percent), and Puerto Rican and other Latin American females (25 percent) (161). In a different 1989 survey of American Indian/Alaska Native teens, 18 percent of the adolescent females in high school reported daily cigarette smoking. Less than 20 percent of the following groups of female high school seniors reported current cigarette smoking in 1985-1989: Mexican Americans (19 percent), Asian Americans (14 percent), and black Americans (13 percent). Data on current smoking from the 1995 YRBSS, available only for white, black, and Hispanic females, reveal an increase among white (40 percent) and Hispanic adolescent females (33 percent) but a slight decline (to 12 percent) among black adolescent females.

Although smokeless tobacco is used more commonly by males than females, smokeless tobacco use among American Indian/Alaska Native and Hispanic females is of concern. Implicated in cancers of the mouth and throat, smokeless tobacco and smoking cigarettes produce comparable levels of nicotine in the body. A variety of regional studies conducted in the 1980s among American Indian/Alaska Native school-age youth found that less than 3 percent of adolescent females use smokeless tobacco, although between 3 percent and 26 percent of adolescent males reported such use (162). One 1989 survey of American Indian/Alaska Native teens reported daily use of smokeless tobacco by 8 percent of high school females. The 1995 YRBSS reported that nearly 3 percent of both white and Hispanic adolescent females used smokeless tobacco, in contrast to 1 percent of black adolescent females (156).

As with cigarettes, large majorities of white (82 percent), Hispanic (81 percent), and black (72 percent) adolescent females reported having had at least one drink of alcohol in 1995 (156). As with cigarette smoking, smaller shares of adolescent females reported current use (defined as having a drink on one or more of the preceding 30 days), with white adolescent females reporting greater current use in both 1985-1989 and 1995 than the other adolescents. In 1985-1989, two-thirds of white females (67 percent) who were high school seniors reported current alcohol use, followed by 60 percent of American Indian/Alaska Native females, 51 percent of Mexican American females, and 43 percent of Puerto Rican and other Latin American females (161). Asian American (34 percent) and black American (33 percent) adolescent female high school seniors were least likely to report current alcohol use. In 1989, more than 13 percent of American Indian/Alaska Native adolescent females reported weekly or more frequent alcohol use (155). The 1995 YRBSS found that alcohol use among white adolescent females (grades 9 to 12) had declined to 53 percent, with rates for Hispanic females at 52 percent and for black females at 39 percent (increases over the 1985-1989 figures) (156). The findings of less alcohol consumption among black and Hispanic youth than among white youth, despite the stresses associated with the poverty and racial prejudice the former groups are likely to confront, defy ready explanation (163).

Marijuana has been tried by about two-fifths of both white (38 percent) and black (42 percent) adolescent females and by 45 percent of Hispanic adolescent females surveyed in the 1995 YRBSS (156). Current

marijuana use, however, was acknowledged by much smaller shares of adolescent females of color in both 1985-1989 and 1995. In 1985-1989, 24 percent of American Indian/Alaska Native female high school seniors reported current marijuana use (i.e., used one or more times during the preceding 30 days), as did 20 percent of white female and 14 percent of Mexican American female high school seniors (161). However, just 10 percent of both black and Puerto Rican and other Latin American female high school seniors reported current marijuana use in 1985-1989, along with 8 percent of Asian American female high school seniors. In 1995, larger shares of black, white, and Hispanic female high school students (grades 9 to 12) indicated current marijuana use than had in the 1980s. Nearly a quarter (24 percent) of Hispanic adolescent females reported current marijuana use, as did 22 percent of both white and black adolescent females.

Although small shares of all female high school seniors in 1985-1989 reported current cocaine use (used one or more times during the preceding 30 days), by 1995, the largest reported use of both cocaine and crack (or freebase cocaine use) was among Hispanic females. In 1985-1989, 9 percent of American Indian/Alaska Native and 4 percent of white female high school seniors acknowledged cocaine use during the preceding 30 days. About 3 percent of Mexican American, Puerto Rican and other Latin American, and Asian American females, along with 1 percent of black females, also reported use (161). However, in the 1995 YRBSS, Hispanic adolescent females were most likely to report ever having tried any form of cocaine (powder, crack, or freebase)—15 percent—and also ever having tried crack (12 percent). Hispanic females in grades 9 through 12 are most likely (6 percent) to acknowledge current use of cocaine as well. Only 5 percent of comparable white females and 0.5 percent of comparable black females reported ever having tried cocaine, with smaller shares (1 percent of whites and 0.2 percent of blacks) admitting current cocaine use. Similarly small shares (3 percent of whites and 0.3 percent of blacks) acknowledge ever trying crack or freebase use of cocaine (156).

Unsafe Motor Vehicle Operation. Because motor vehicle accidents are a major cause of death for adolescents, high-risk behaviors when operating or riding in motor vehicles are noteworthy. In the 1995 YRBSS, more than a fourth (26 percent) of black adolescent females reported rarely or never using a seat belt when riding in a car or truck driven by someone else (156). Fifteen percent and 14 percent, respectively, of white and Hispanic adolescent females reported this same failure to use seat belts. In addition, half of Hispanic adolescent females reported that one or more times during the preceding 30 days they rode with a driver who had been drinking, and 14 percent reported that they themselves had driven after drinking alcohol. The shares of white (37 percent) and black (33 percent) adolescent females who reported riding one or more times during the preceding 30 days with a driver who had been drinking alcohol are comparable to each other. A larger share of white females (14 percent) than black females (5 percent), however, indicated having driven after drinking alcohol (156).

Healthful Behaviors

Dietary practices and physical activity can be health affirming for adolescents, as for adults. More than a fifth of adolescent white, black, and Hispanic females (22 percent of each group) reported that they had eaten five or more servings of fruits or vegetables on the day preceding the 1995 YRBSS. In addition, large majorities of these three groups of adolescent females (76 percent of whites, 69 percent of Hispanics, and 56 percent of blacks) indicated that on the day preceding this same survey, they had eaten no more than two servings of foods high in fat (156).

A majority of white non-Hispanic adolescent females (57 percent) reported that they participated in vigorous physical activity (activity that caused sweating and hard breathing for at least 20 minutes) on at least three of the seven days preceding the administration of the 1995 YRBSS (156). Smaller shares of black and Hispanic adolescent females—41 percent of blacks and 45 percent of Hispanics—also reported participating in vigorous physical activity. A smaller share of white adolescent females (17 percent) than of both black (26 percent) and Hispanic (28 percent) adolescent females reported participating in moderate physical activity (that is, walking or bicycling for at least 30 minutes) on five or more of the seven days preceding the 1995 YRBSS (156).

Elderly Women of Color

The elderly population generally is defined as persons 65 years of age and older, with persons ages 65-74 years referred to as the "younger-old," persons ages 75-84 years as "old," and persons ages 85 years and older as the "older-old" (66). Despite this convention, persons may be recognized as elderly at widely divergent ages, as young as 40 years of age for many Southeast Asian subgroups and among some Native American populations (66). This recognition reflects the fact that as early as ages 45 or 55, many American

Indians, for example, have physical, emotional, and social impairments characteristic of the general U.S. population 65 years of age and older. In addition, three times as many American Indians/Alaska Natives as persons in the general population die before reaching the age of 45 (6). In one survey among American Indians in Los Angeles, the median age for both men and women who were considered elders was 58 years (4).

During this century, the elderly population of the United States already has increased tenfold, from 3.1 million in 1900 (about one in every 25 Americans) to 31.1 million in 1990 (about one in every eight Americans) (164). Today, the elderly are the fastest growing age population in the nation. Although whites dominate the elderly population at present, their share is projected to decline over the next 60 years as the shares of the racial/ethnic minority elderly increase. In 1980, members of racial/ethnic minority groups were more than 10 percent of the elderly population, with their share increasing to 13 percent in 1990 (165). By 2050, members of racial/ethnic minority groups are projected to be a third of the elderly.

Of the 31.1 million elderly in 1990, about 27 million, or 87 percent, were white non-Hispanic (165). Non-Hispanic blacks (2.4 million) were 8 percent of the elderly population, with Hispanics (1.1 million), Asians and Pacific Islanders (431,000), and American Indians/Alaska Natives (108,000) accounting for 4 percent, 1 percent, and 0.3 percent shares, respectively. By the year 2020, the share of white non-Hispanics among the elderly is projected to fall to 78 percent, with the share of black non-Hispanics growing to nearly 9 percent, Hispanics increasing to nearly 9 percent, Asians and Pacific Islanders increasing to more than 4 percent, and American Indians/Alaska Natives increasing to 0.5 percent of the population 65 years of age and older. In the year 2050, under current projections, whites will be 67 percent of the elderly, with Hispanics nearly 16 percent, non-Hispanic blacks 10 percent, Asians and Pacific Islanders more than 7 percent, and American Indians/Alaska Natives 0.6 percent of this population (165).

Into the middle of the 21st century, the population 80 years and older, those most likely to need health care and economic and physical support, is projected to be the fastest growing segment of the elderly population, increasing from about 7 million people in 1990 to nearly 31 million in 2050 (165). The share of whites among this elderly subpopulation also is expected to decrease—from 88 percent in 1990 to 71 percent in 2050—while the shares of racial/ethnic minorities are expected to increase. The Hispanic population 80 years of age and older, as a share of all persons 80 years of age and older, is expected to quadruple over that period, from 3 percent to nearly 15 percent; the corresponding share among the Asian and Pacific Islander elderly is projected to grow from 1 percent in 1990 to nearly 7 percent in 2050. As shares of the elderly population 80 years of age and older, American Indians/Alaska Natives and blacks change very little. Blacks are projected to be 7 percent of this population in 2050 (as they were in 1990), while the share of this American Indian/Alaska Native elderly subpopulation is projected to double. This doubling, however, represents an increase in share from only 0.3 percent in 1990 to 0.6 percent in 2050 (165).

Demographics

Native Americans. The elderly (65 years of age and older) were small shares of Native American populations in 1990—6 percent of American Indians/Alaska Natives, 5 percent of Native Hawaiians, and 3 percent of American Samoans (152). These shares are less than half the share of the elderly among non-Hispanic whites at that time. Most elderly American Indians/Alaska Natives and Native Hawaiians live in the South and West, along with the majority of the population under age 65 in these two groups. Three in four American Indian elderly lived in Western and Southern states, with 40 percent in Oklahoma, California, and Arizona combined (165). Contrary to popular belief, most elderly American Indians/Alaska Natives do not return to their reservations as they age. American Indians/Alaska Natives prefer to age in place as do many elderly, and a sizable elderly population is found among the majority of American Indians/Alaska Natives who live in urban areas (8).

The population 80 years of age and older among American Indians/Alaska Natives also is growing, with the projection that American Indians/Alaska Natives in this age group will increase from 18 percent of all American Indian/Alaska Native elderly in 1990 to 39 percent in 2050 (165). This increase among the older-old would mean that greater numbers of younger American Indians/Alaska Natives in their 50s and 60s will have surviving elders. The Parent Support Ratio (number of persons aged 80 and older per 100 persons ages 50-64) for American Indians/Alaska Natives will more than triple, from 11 to 38 (165).

Among both American Indian/Alaska Native and Native Hawaiian women, the elderly are comparable proportions; 7 percent of American Indian/Alaska Native and 6 percent of Native Hawaiian women are elderly (152). Younger-old women (65-74 years) are 4 percent

of these two female populations. In addition, among the total elderly populations of American Indian/Alaska Natives and Native Hawaiians, women are close to three-fifths (58 percent and 57 percent, respectively).

Hispanics. Elderly persons constituted 5 percent of the U.S. Hispanic population in 1990 (165). As does the population younger than 65 years of age, the Hispanic elderly primarily live in the South and West; three of every four elderly Hispanics live in these regions. Nearly half of the Hispanic elderly (49 percent) were of Mexican origin, 15 percent Cuban, 12 percent Puerto Rican, and 25 percent of other Hispanic subgroups. Almost 40 percent of older Hispanics report speaking no English, although more than a quarter report good English skills (166). Part of this limited English knowledge relates to age at immigration, with a sizable proportion of Hispanics, particularly Cubans, having immigrated to the United States at age 55 years and older. The population of elders 80 years and older is projected to grow from 19 percent of all Hispanic elderly in 1990 to 36 percent in the year 2050 (165). Because of this growth, the Parent Support Ratio is projected to more than triple for Hispanics over this period, from 11 to 36.

Nearly 6 percent of all Hispanic females are elderly, with about 4 percent among the younger-old population (ages 65-74) (152). Hispanic women also are the majority of all elderly Hispanics, constituting nearly three-fifths (59 percent) of the population 65 years and older and 62 percent of the population ages 75 years and older.

Black Americans. The elderly were 8 percent of the entire black population in 1990, with more than half of these persons living in Southern states (165). As with other racial/ethnic groups, the older-old population is the fastest growing segment of the black elderly. Two in 10 elderly blacks were 80 years and older in 1990, and this proportion could increase to three in 10 by the year 2050. This population growth could cause the Parent Support Ratio for blacks to increase from 16 (persons 80 years of age and older per every 100 persons 50-64 years of age) in 1990 to 27 by the middle of the next century.

Elderly black women (65 years and older) were 10 percent of the black female population in 1990, slightly more than the 8 percent share that all the elderly were of the entire black population (152). The majority of black elderly females (58 percent) are younger-old (65-74 years), and these younger-old black women are three-fifths of all blacks who are ages 65-74 years. Females are 62 percent of all elderly blacks but two-thirds (66 percent) of elderly blacks ages 75 years and older.

Asians and Pacific Islanders. Among Asians and Pacific Islanders, 6 percent of the population is elderly, and 55 percent of these elderly live in three states—California, Hawaii, and Washington (25,165). As with other elderly populations, persons ages 80 and older are the fastest growing segment, projected to increase from 16 percent of all elderly Asians and Pacific Islanders in 1990 to 39 percent in 2050. Consistent with this growth, the ratio of persons ages 80 years and older per 100 persons ages 50-64 years (the Parent Support Ratio) is expected to increase more than threefold, from nine to 34 (165).

If Asian Americans alone are the base, 3 percent of this population is elderly; more than twice that share (7 percent) of all Asian women are elderly (152). Women are slightly more than 55 percent of all Asians 65 years of age and older and constitute roughly equivalent shares of the elderly subpopulations 65-74 years of age and 75 years of age and older.

Access to Health Care

Elderly women of color share several characteristics with all elderly women. First, elderly women of color outnumber elderly men of color. Although the sex ratios (males per 100 females) among the major racial/ethnic minority elderly subpopulations are less than 100, they range from 62 elderly black men per 100 elderly black women to 82 elderly Asian men per 100 elderly Asian women (165). The sex ratio for African Americans ages 40 to 44 is similar to the sex ratio for white Americans ages 60 to 64 (77). The higher sex ratio for elderly Asians reflects the historical gender imbalance among Asian immigrants to the United States, with Asian men often migrating alone initially (25).

Second, elderly women of color are more likely to be widowed than are elderly men of color. These differences are striking among even the younger-old years (65-74), but become more pronounced for women of color in older age groups. For example, 48 percent of black women 65 to 74 years of age were widowed, compared to 19 percent of black males. Sixty-four percent of black women 75 to 84 years of age were widowed, versus 38 percent of black males (165). Widowed women often are impoverished because of the loss of the financial support of their husbands (164).

Third and finally, the longer women of color live, the more likely they are to be affected by chronic illness, disability, and dependency, as is true among all elderly women. As one example, when compared to white

elderly women, elderly black women are more likely to be widowed or separated and to have at least three medical problems, usually among this set—hypertension, diabetes, cardiovascular disease, and cerebrovascular events (77).

In addition to the characteristics shared with all elderly women, elderly women of color bring to their later years the cumulative effects on their health of being people of color in a society in which they often faced disadvantages because of this. These disadvantages are reflected in limited resources available throughout their lives to meet health care and other needs (167). The greater proportions of households headed by women of color (compared to white women) in all age groups, combined with the greater incidence of poverty among these female-headed households (relative to households headed by males) suggest that as women of color age and those with spouses become widows, the proportion of impoverished women of color would only increase. Wray (1992) has found that socioeconomic status is indeed a notable factor in health differences between blacks and whites older than 55 years of age (66).

The lack of social and psychological coping resources is often accompanied by a physical lack of facilities, such as the limited availability of skilled and intermediate long-term care facilities on American Indian/Alaska Native reservations (8). Currently, 15 such facilities exist among the nearly 300 American Indian/Alaska Native reservations. This lack of facilities means that American Indian/Alaska Native elderly must be cared for within the communities in which they live, regardless if resources are available for this purpose (5).

Like elderly American Indians/Alaska Natives, elderly Hispanics are more likely to be cared for within Hispanic communities than in nursing homes. The strength and centrality of family values are noted to explain this (166). However, because more-acculturated Hispanic families provide lower levels of informal support to the aged, this may change as the number of Hispanics in the United States and their length of exposure to and influence by American culture grow. Thus, a future need for increased access to nursing home and to home health care may exist for the Hispanic elderly (166).

Similarly, black American patients and families currently are more likely to prefer formal services in the home to a post-hospital institutional placement (168). Since black elders were found to enter post-hospital home care with higher levels of physical and cognitive impairment and to have caregivers with more limitations than did white elders, the ability of this elderly population to avoid nursing home placement also may be limited in the future. The preference for in-home services is related to the perception among black elders and their families that services located outside of black communities are not culturally compatible with the needs of these elders. Reluctance to use out-of-home facilities often results in black elders not using services they need or are entitled to (167).

The change of roles for elders vis-á-vis younger persons within Asian families that have migrated to the United States has implications both for the living arrangements of and access to care among elders. Although Asian elders may help with childcare or perform household duties for their families, they no longer can offer financial support, land, or other material goods as they would have in their homelands. Thus, as the case of Chinese elders illustrates, few live with their children, who have left the central cities in which the families first settled. Instead most Chinese elderly remain in Chinatowns where their needs for social interaction and health care services are most easily met (169).

Greater future unmet need both for health insurance and for health care services thus might be anticipated among elderly women of color than among elderly white women. Currently, though, racial/ethnic minority elders report lower rates of utilization than whites, despite their greater per capita needs for health care services (66). Although the lack of insurance does not account for this disparity entirely, it is relevant to reduced access to services among elderly women of color who may be ineligible for federal health insurance. While 96 percent of all women ages 65 years and older report having Medicare coverage, only 88 percent of Mexican Americans, 77 percent of Puerto Ricans, and 87 percent of Cuban Americans in this same age group reported this coverage (170). Similar lacks of coverage would be expected among other racial/ethnic groups with large immigrant populations.

Other barriers to care are socio-cultural and political. For example, because they ascribe ill health and debility to the normal aging process, American Indians/Alaska Natives may be less likely than others to seek care for conditions that are treatable and curable (8). This ascription by itself may constitute a barrier to care. In addition, elderly American Indians/Alaska Natives often lack trust in medical care that is not Native. Urban American Indians are unwilling to endure lengthy waits at non-Native clinics to get care because of their cultural perceptions that "many mainstream attitudes are intolerably rude" (4). Behaviors such as getting right down to business, addressing strangers in loud, confident tones, and frequently interrupting speakers increase social

distance between elderly American Indians/Alaska Natives and non-American Indian/Alaska Native professionals. The "blatant racism" and the "pernicious effects of stereotyping" that elderly American Indians/Alaska Natives have encountered in their years of seeking care also become barriers to seeking care in their later lives (4). They have had the lifelong experience of being turned away from public clinics whose staff incorrectly insist that the Indian Health Service is the sole agency responsible for their care (4).

In one study, older American Indians reported that they "fear non-Indian health professionals, do not expect to be treated fairly by them, and anticipate adverse contact experiences" (4). Attitudes and experiences such as these underlie the SAIAN findings that only 66 percent of American Indian/Alaska Native women ages 60 years and older had ever had a breast exam, compared to 86 percent among all U.S. women that age (171). Similarly, only 17 percent of American Indian/Alaska Native women ages 60 and older reported ever having had a mammogram, while 38 percent of all U.S. women in this age group reported ever having had this test (171).

Similar socio-cultural and political barriers interfere with the access of elderly black women in the rural South to health care services. Elderly black women in rural North Carolina reported feeling "distanced" from the local health care system and often allowed this feeling to translate into delay or avoidance of breast cancer screening or other preventive services (172). In 1991, 58 percent of African American women ages 65 and older reported not having had a mammogram within the past two years; 51 percent of white women the same ages reported the lack of this test (139). Although poverty also is a factor in this lack of access to preventive services, it is not the entire explanation. One legacy of the history of official as well as de facto discrimination within the rigidly segregated health care systems of the Old South is that older black women continue to perceive an unwelcoming attitude within predominantly white health care systems. Black elders often turn to kin and friends, rather than to the local health care system, for support and information (173).

Even if elderly black women get into the health care system to see providers, diagnosing and treating their conditions become complicated by communication and scientific barriers. Communication styles developed by black elders as coping mechanisms for functioning in a racist society may interfere with the process of sharing information with providers to enable them to diagnose medical conditions. Black elders may be reluctant to offer information about themselves or their medical histories, and they may be difficult to engage in a medical encounter (167). They also may be hesitant to report that treatments are not satisfactory, for fear of being ignored or receiving retaliation. In addition, conditions among the black elderly sometimes are misdiagnosed because most standard medical texts do not include discussions of the way skin color may affect the presentation or manifestation of disease (167). Because pressure sores or jaundice may present differently in patients with darker skin tones, potentially significant conditions may not be detected until they are in advanced stages, or benign conditions may be diagnosed as being more serious than they really are.

Although the inability to speak English constitutes a major barrier for elderly Asian women when seeking health care, it is not the only impediment. Elderly Asian women who speak English may only know how to describe their pains or distress in their native languages. To save face or prevent conflict, these women may answer "yes" when they really do not understand something and, thus, agree to a treatment plan but not comply with it (169). Many Asian elderly believe that the healer is supposed to be able to make a diagnosis without much discussion and with little or no physical contact. Physicians who ask too many questions, need too many tests, or suggest probabilities (rather than guarantees) of outcomes are likely to lose credibility among these elderly. This loss may result in premature discontinuation of therapies prescribed by western medicine and the failure to acknowledge the use of traditional medicines for fear the provider will be angry, refuse to treat them, or cause their medicinal plants to be taken away from them (169).

The perception of illness by elderly Asian Americans, which focuses primarily on symptoms such as pain, weakness, dizziness, or nausea, also can serve as a barrier to seeking care (25). This perception of illness makes it difficult for Asian Americans to conceptualize—and thus seek treatment for—diseases such as cancer, hypertension, or diabetes mellitus. For example, it is especially difficult for older Asian American women to perceive of illness in the female reproductive organs (25). This may partially explain the low percentages of Asian American women who report getting mammograms and Pap smears. Cultural masking of the breasts and vagina after menopause often result in modesty and a deferment of examination of these organs (25). This failure to seek preventive care is reflected in the fact that in 1991, a somewhat lower share (two-thirds) of Asian women 65 years of age and older reported having had a checkup within the past year, compared to 68 percent

of white and 74 percent of black elderly women (139). Hispanics were the only group of elderly women who reported a smaller share (60 percent) having had a checkup within the past year. Asian women ages 65 years and older (83 percent) also were less likely to report having their blood pressure measured within the past year than other women (87 percent white, 85 percent Hispanic, and 90 percent black elderly women) and most likely to report (7 percent of Asian American women) never having their blood pressure checked, or having had it checked three or more years ago (139).

Health Assessment

Elderly people of color, especially Hispanics and African Americans, are known to have a greater number of functional disabilities, as measured by restricted activity and bed-disability days, than are elderly whites of the same ages (66). Activity limitations due to arthritis increase with age for all women, but are especially severe for African American and American Indian/Alaska Native women among the 2.5 million women 65 years of age and older reporting this condition (174). In addition, although the age-specific incidence of hip fractures in black women is about half that of white women, the rates in black women are considerable and are associated with higher subsequent rates of disability and even mortality (175). Osteoporosis, often the cause of hip fractures among elderly women, is widely known to be more common in Asian women than in other racial/ethnic groups of elderly women (169). Although the decrease in calcium absorption with age is implicated in the incidence of osteoporosis among Asian women, the lack of exercise among this subpopulation also is a causal factor.

American Indian/Alaska Native women ages 65 and older included in the SAIAN reported greater incidence than all United States women of gallbladder disease and of diabetes mellitus, two chronic conditions that may contribute to functional disability and impairment (176). Diabetes continues to be a problem among black and Hispanic women 65 years of age and older as it was in earlier adult years. Among black women, diabetes can be termed epidemic, with one in four black women older than 55 years of age with the disease, double the rate among white women (177). Mexican American (15 percent) and Puerto Rican (16 percent) women ages 45 to 74 years have a higher prevalence of diabetes mellitus than both non-Hispanic white (6 percent) and black women (11 percent) (170). Hypertension, especially among Filipino women, and high levels of cholesterol are two major causes of morbidity among Asian women (25).

Racial/ethnic minority elders have been found to be somewhat more likely than other elderly persons to experience psychosocial distress (178). This is especially true for those elderly people of color who have experienced lives with low incomes, minimal education, substandard housing, and a general lack of opportunity, and thus have fewer social and psychological coping resources available to them. At the same time, the accuracy of reports of psychiatric illnesses among African Americans has been questioned (77). Diagnostic biases have been found to result in greater likelihood of a diagnosis of schizophrenia among blacks than is warranted upon re-examination of patients. Erroneous diagnoses are attributed to the social distance between the treating psychiatrists and the patients, the presence of racism, and unconscious fears related to working with patients different from themselves. These erroneous diagnoses often result in the increased use of restraints and higher doses of drugs being prescribed for black elderly patients (than for white elderly patients) with mental health problems (77).

Effective responses to mental problems vary by racial/ethnic group. For example, in one study family help has been found to buffer psychological distress among elderly blacks, while higher levels of family interaction were associated with greater depression among elderly Mexican Americans (178).

The major causes of death for racial/ethnic minority elderly populations include diabetes and hypertension, which are prominent as causes of deaths among African American, Hispanic, and Native American elders (66). The six leading causes of death for elderly American Indians/Alaska Natives are heart disease, cancers, cerebrovascular disorders, pneumonia and influenza, diabetes mellitus, and accidents (8). Cancer survival rates among elderly American Indians/Alaska Natives are the lowest among all United States subpopulations.

In one state survey, elderly Hispanics (both male and female) were found to have lower death rates than elderly non-Hispanic whites (both male and female) for almost all causes, especially diseases of the heart, chronic obstructive pulmonary disease and allied conditions, and cancers (166). Older Hispanics had higher death rates due to diabetes mellitus, motor vehicle accidents, kidney ailments (such as nephritis, nephrotic syndrome, and nephrosis), and chronic liver disease and cirrhosis than did non-Hispanic whites.

Although age-adjusted mortality rates generally are lower for Asian Americans than for whites, there is great variety in the rates reported by subgroups of Asians

(25). Asian and Pacific Islander women 65 years of age and older have a death rate from suicide (more than 8 per 100,000) that is four times that of elderly black women (2 per 100,000) and 1.3 times that of elderly white women (more than 6 per 100,000). Suicide rates among elderly Chinese American and Japanese American women, in particular, are known to exceed suicide rates among non-Asian women the same ages (25). Social isolation is posited as an explanation for this, although health problems are mentioned most often as the reason for suicide when suicide notes are left (179).

Death rates among some racial/ethnic elderly populations differ from those among whites due in part to the "mortality crossover effect" observed among African Americans and American Indians/Alaska Natives. The mortality crossover effect is a pattern of selective survival in which the least robust African Americans and American Indians/Alaska Natives die at earlier ages and hardier ones survive to much older ages (66). This explains why life expectancy for whites exceeds that for African Americans at age 65, but the reverse becomes true around age 75—that is, life expectancy for African Americans exceeds that for whites (66).

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HEALTH ASSESSMENT OF WOMEN OF COLOR

Life Expectancy

- Among both whites and people of color, life expectancy (or expected remaining years of life) from birth is greater for women than for men, with the greatest gaps (of 9 years) reported between black women and men, and between Puerto Rican women and men (1,2,3).
- The life expectancy for white men exceeds that of all men of color, while the life expectancy of white women exceeds that of most women of color. Life expectancies for many Asian women living in Hawaii and for Puerto Rican women (living in Puerto Rico) exceed that of white women, however (1,2,3).
- Based on current mortality data, the life expectancy for all Hispanics in the United States (both males and females) is 79 years (4). For the population living in Puerto Rico, female life expectancy from birth is close to 80 years, while for men it is nearly 71 years (5).
- Hispanic women have a longer life expectancy (more than 77 years) than either black American or American Indian/Alaska Native women (both more than 74 years) (1,2,3).
- The predominantly black population of the U.S. Virgin Islands reports life expectancies at birth (for both men and women) that exceed these expectancies for other black Americans. Life expectancy for females in the Virgin Islands is 79 years, compared to slightly more than 74 years for black American females elsewhere in the United States. The gap in life expectancy is even greater between males in the Virgin Islands (more than 70 years) and black American males elsewhere in the United States (close to 65 years) (1,5).
- Life expectancy from birth for Native Hawaiian females living in Hawaii was slightly more than 77 years in 1990. Life expectancy for Samoan women living in the U.S. Territory of American Samoa is close to 75 years; for Guamanian women, life expectancy is slightly more than 76 years (5,6).
- American Indian/Alaska Native women in the majority of Indian Health Service (IHS) service areas have a life expectancy of 74 years. This average life expectancy for American Indian/Alaska Native women reflects service areas such as Albuquerque and Nashville in which life expectancy is 78 years, along with the Aberdeen service area where life expectancy is 69 years (3).
- Life expectancy at birth for all U.S. Asian populations (both males and females) is estimated at nearly 83 years (4). Life expectancies based on the female subpopulations in Hawaii in 1990 are as follows: white—nearly 79 years; Chinese—over 86 years; Filipino—nearly 82 years; and Japanese—nearly 85 years (6).

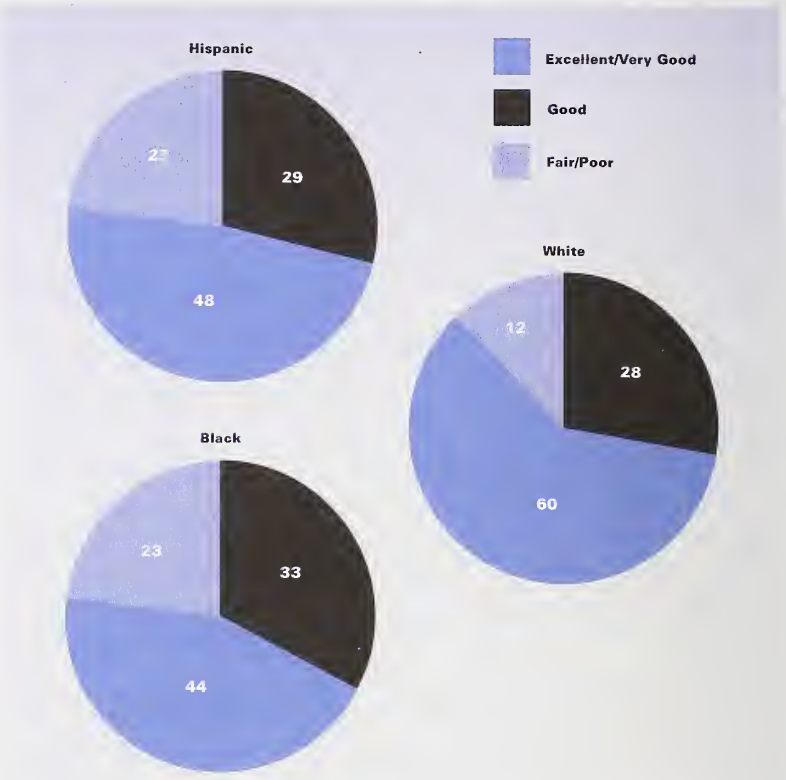
FIGURE 1
Total Life Expectancy in Years by Race and Sex, 1989, 1991-1993, 1994

SOURCES: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996. National Institutes of Health, *Report of the National Institutes of Health: Opportunities for research on women's health*, Bethesda, MD: Office of Research on Women's Health, 1991. Indian Health Service, *Regional differences in Indian health 1996*, Rockville, MD: US Public Health Service, 1997. Braun KL, Yang H, Onaka AT, Horiuchi BY, Life and death in Hawaii: Ethnic variations in life expectancy and mortality, 1980 and 1990, *Hawaii Med J* 1996; 55(12):278-283, 302. Honorable D Christian-Green, Member of Congress, personal communication, February 1997.

Self-Reported Health Ratings

- In 1993, while 60 percent of white women believed they were in excellent health, less than half of Hispanic women (48 percent) and black women (44 percent) reported the same health rating. Between 28 percent and 33 percent of black, Hispanic, and white women felt they were in good health (7).
- Just under a quarter of black and Hispanic women (both 23 percent) reported themselves to be in poor health in 1993, compared to 12 percent of white women (7).
- Ninety-two percent of white working women reported that they were in good or excellent health in 1993, compared to 84 percent of black and Hispanic women (7). One-third of non-working black and Hispanic women reported that they were in fair or poor health, versus 18 percent of white non-working women. Regardless of employment status, white women feel better about their health than do black and Hispanic women (7).

FIGURE 2
Self-Reported Health Ratings Among Women by Race, 1993
Percent



SOURCE: Hartmann HI, Kuriansky JA, Owens CL, in: Falik MM, Collins KS (eds), *Women's Health: The Commonwealth Fund Survey*, Baltimore, MD: Johns Hopkins University Press, 1996, pp. 296-323.

Major Causes of Death

- Diseases of the heart are the major cause of death for all females, except Asian and Pacific Islander females, for whom they are the second major cause of death (1). In 1993, diseases of the heart accounted for as much as 34 percent of all deaths to white females and as little as 22 percent of all deaths to American Indian/Alaska Native females (1).
- Age-adjusted death rates from diseases of the heart ranged from a high of 164 per 100,000 black women to 56 per 100,000 Asian and Pacific Islander women between 1991 and 1993. Death rates for Hispanic women and American Indian/Alaska Native women—70 per 100,000 and 74 per 100,000, respectively—are less than the rates reported by both black women (noted above) and white women (99 per 100,000) (1).
- Cancers (malignant neoplasms) are the second most common cause of death for all females except Asian and Pacific Islander females, for whom it is the main cause of death. Twenty-eight percent of all deaths to Asian and Pacific Islander females in 1993 were due to cancers (1).
- Black and white women reported the highest death rates from all forms of cancer in the 1991-1993 period. The death rate for black women of 136 per 100,000 exceeded the rate of white women (111 per 100,000), as well as the rates of American Indian/Alaska Native (71 per 100,000), Hispanic (67 per 100,000), and Asian and Pacific Islander women (66 per 100,000) (1).
- The third-ranked killer of most females is cerebrovascular diseases (primarily strokes). American Indian/Alaska Native women provide the only exception to this because unintentional injuries is their third-ranked killer. Cerebrovascular diseases rank fifth among the causes of death for American Indian/Alaska Native women (1).

TABLE 1
Leading Causes of Daath for Women, 1993
Numbers of Deaths According to Sex, Detailed Raca, and Hispanic Origin

American Indian/Alaskan Native	
All causes	4,145
Diseases of heart	932
Malignant neoplasms	720
Unintentional injuries	377
Diabetes mellitus	275
Cerebrovascular diseases	256
Chronic liver disease and cirrhosis	181
Pneumonia and influenza	152
Chronic obstructive pulmonary disease	142
Nephritis, nephrotic syndrome, and nephrosis	64
Suicide	58
Hispanic*	
All causes	34,758
Diseases of heart	9,567
Malignant neoplasms	7,253
Cerebrovascular diseases	2,222
Diabetes mellitus	1,872
Unintentional injuries	1,680
Pneumonia and influenza	1,253
Chronic obstructive pulmonary disease	906
Certain conditions originating in the perinatal period	795
Human immunodeficiency virus infection	784
Congenital anomalies	712
Black	
All causes	128,649
Diseases of heart	40,654
Malignant neoplasms	26,802
Cerebrovascular diseases	9,958
Diabetes mellitus	5,732
Unintentional injuries	3,807
Pneumonia and influenza	3,673
Human immunodeficiency virus infection	2,995
Certain conditions originating in the perinatal period	2,582
Chronic obstructive pulmonary disease	2,522
Homicide and legal intervention	2,297
Asian/Pacific Islander	
All causes	10,854
Malignant neoplasms	3,011
Diseases of heart	2,832
Cerebrovascular diseases	1,074
Unintentional injuries	519
Pneumonia and influenza	430
Diabetes mellitus	307
Chronic obstructive pulmonary disease	239
Suicide	172
Congenital anomalies	139
Homicide and legal intervention	133
White	
All causes	963,108
Diseases of heart	331,563
Malignant neoplasms	219,996
Cerebrovascular diseases	79,772
Chronic obstructive pulmonary disease	43,803
Pneumonia and influenza	40,569
Unintentional injuries	25,703
Diabetes mellitus	24,150
Atherosclerosis	10,052
Nephritis, nephrotic syndrome, and nephrosis	9,685
Septicemia	9,609

*Excludes data from States lacking an Hispanic-origin item on their death certificates

SOURCE: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996.

- Death rates from cerebrovascular diseases also were highest among black women (40 per 100,000). The second highest death rates from cerebrovascular diseases during the 1991-1993 period were reported for white women (23 per 100,000) and for Asian and Pacific Islander women (22 per 100,000). Mortality rates for American Indian/Alaska Native (19 per 100,000) and Hispanic (17 per 100,000) women were the lowest during that period (1).
- Unintentional injuries kill many females, although their ranking among the top 10 causes of death varies by racial/ethnic

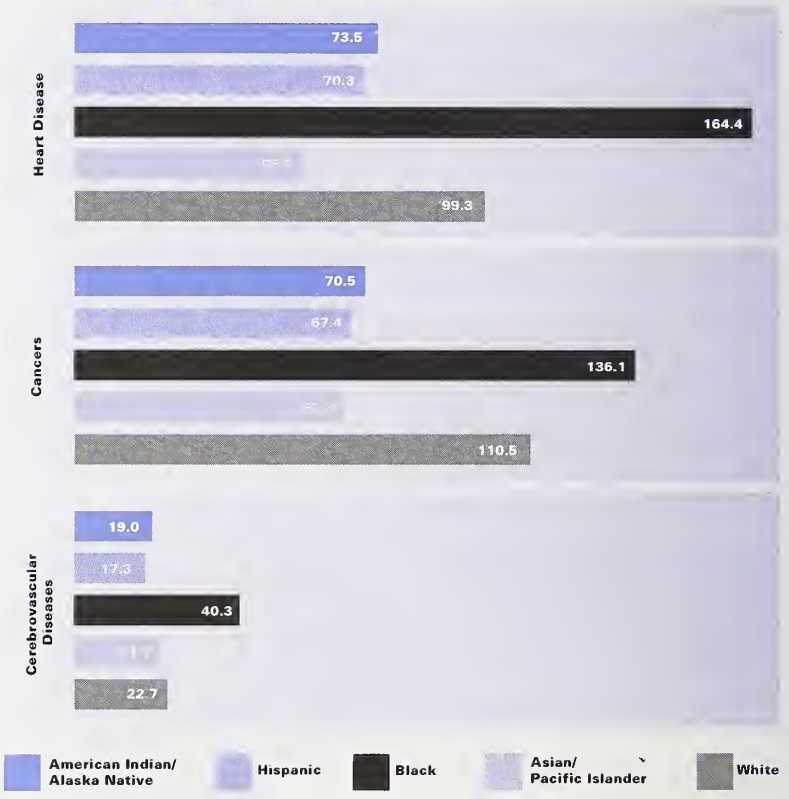
group. As noted above, they are the third-ranked killer of American Indian/Alaska Native women. They are the fourth-ranked killer of Asian and Pacific Islander females, the fifth-ranked killer of black and Hispanic females, and the sixth-ranked killer of white females (1).

Although its ranking varies, diabetes mellitus is among the top 10 causes of death for all women. It is the fourth-ranked cause of death for black, American Indian/Alaska Native, and Hispanic females, and the sixth-ranked cause of death for Asian and Pacific Islander females. Diabetes mellitus is the seventh-ranked killer of white females (1).

Chronic obstructive pulmonary diseases (COPD), the fourth-ranked cause of death for white females, is a major killer of other women, but to a lesser extent. It is the seventh-ranked killer of Asian and Pacific Islander females, the eighth-ranked killer of American Indian/Alaska Native females, and the ninth-ranked killer of black females (1).

Several conditions are notable because they cause large numbers of deaths only among women of color. HIV infection is among the top 10 causes of death only for black (seventh-ranked) and Hispanic (ninth-ranked) women. Suicide is a major cause of death for Asian and Pacific Islander women (eighth-ranked) and American Indian/Alaska Native women (tenth-ranked). Homicide and legal intervention is the tenth-ranked cause of death for black and Asian and Pacific Islander females. Chronic liver disease and cirrhosis are major killers (sixth-ranked) only for American Indian/Alaska Native women (1).

FIGURE 3
Age-Adjusted Mortality Rates from Major Causes of Death Among Women by Race/Ethnicity, 1991-1993
Per 100,000 Population

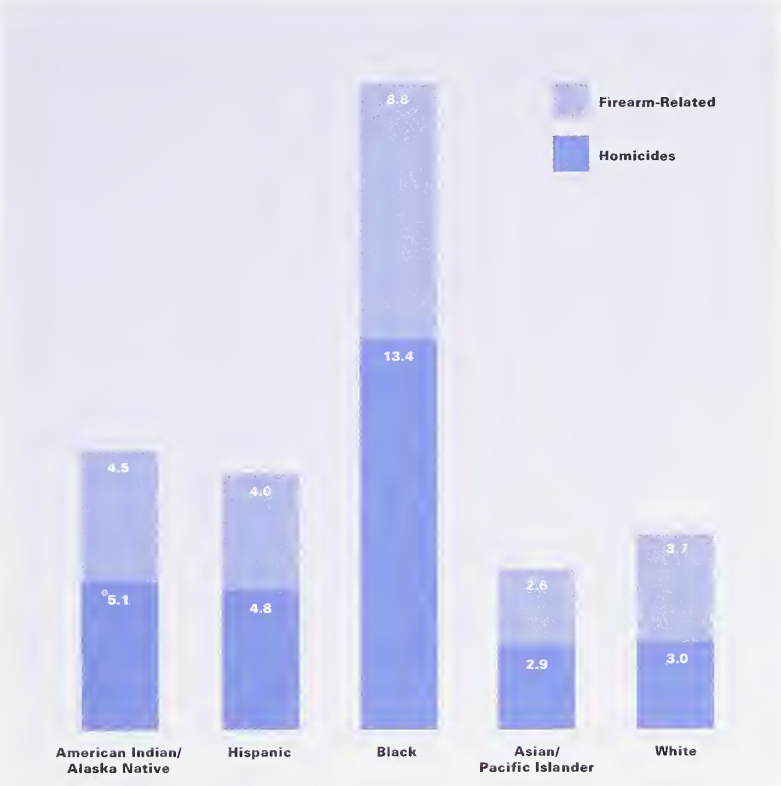


SOURCE: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996.

Other Causes of Death

- In 1993, among women, blacks had the highest mortality rates from homicides and firearm-related events (more than 13 per 100,000 and nearly 9 per 100,000, respectively). Approximately half as many American Indian/Alaska Native women died from each of these causes (5 per 100,000) as did black women. The homicide rate was nearly 5 per 100,000 Hispanic women and 3 per 100,000 for both Asian American and white women. Firearm-related mortality rates ranged from nearly 3 per 100,000 to nearly 5 per 100,000 among American Indian/Alaska Native, Asian and Pacific Islander, Hispanic, and white women (1).
- The motor-vehicle death rate for most women of color was between 8 per 100,000 and 10 per 100,000, except for American Indian/Alaska Native women. More than twice as many American Indian/Alaska Native women (22 per 100,000) died in motor-vehicle-related accidents in 1993 as did black, Hispanic, Asian and Pacific Islander, and white women (1).
- Unintentional injuries took the lives of more white, black, and American Indian/Alaska Native women than did firearm-related and motor-vehicle-related deaths and homicides in 1993. The mortality rate for unintentional injuries among American Indian/Alaska Native women was nearly 42 per 100,000, compared to 20 per 100,000 black women and 17 per 100,000 white women (1).

FIGURE 4
Death Rates from Homicides and Firearms Among Women by Race/Ethnicity, 1993
Per 100,000 Population



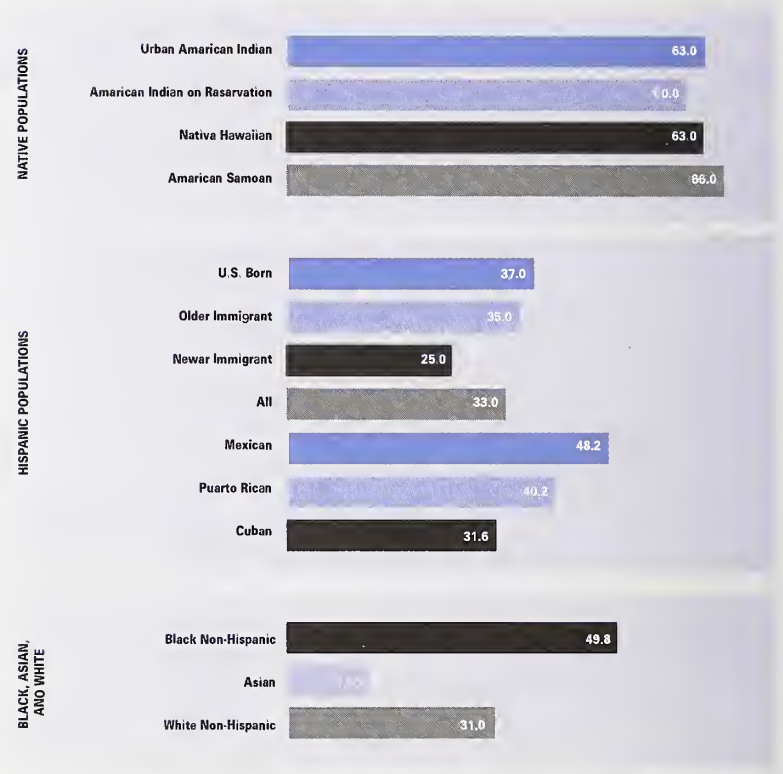
SOURCE: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996.

Behavior and Lifestyles

Body Weight: Women of Color

- Obesity—a condition associated with diabetes, hypertension, and cardiovascular disease—is a problem for many women of color and is related in part to their sedentary lifestyles and to the "diets of poverty" (high in fat and low in fruits and vegetables) that many consume.
- Native American populations are the most likely to be overweight or obese, which is defined as excess body weight for height. Sixty percent of all American Indian women on reservations in 1987 and 63 percent of urban American Indian women were obese. Between 61 percent and 75 percent of all Yaqui Indian women across all age groups were obese. Similarly high rates were found among Native Hawaiian and American Samoan females, 63 percent and 66 percent, respectively. A significantly smaller proportion of Navajo Indian women were obese (between 15 percent and 32 percent, depending on age) (8,9,10,11).
- Based on data from 1982-1984, 1988-1991, and 1991 for women 20 to 74 years of age, the percentage of overweight women ranged from 12 percent for Asian women to 31 percent and 50 percent for non-Hispanic white and black women, respectively. The shares of overweight women from the major Hispanic subpopulations were arrayed in between these figures. Forty-eight percent of Mexican American females were overweight compared to 40 percent of Puerto Rican and 32 percent of Cuban women (12,13).
- Hispanic immigrants who have resided in the United States for less than 15 years are less likely to be obese (25 percent) than more acculturated immigrants who have lived here for more than 15 years (35 percent) (12).
- Nearly 40 percent of Hispanic, black, and white women reported attempting to lose weight in 1991, compared to 28 percent of Asian American women (12).

FIGURE 5
Percent of Overweight Women by Race/Ethnicity, 1982-1984, 1987, 1988-1990, 1991



SOURCES: Lefkowitz D, Underwood C, *Personal health practices: Findings from the Survey of American Indians and Alaska Natives*, Publication No. 91-0034, National Medical Expenditure Survey, Research Findings 10, Agency for Health Care Policy and Research, Rockville, MD: US Public Health Service, 1991. National Coalition of Hispanic Health and Human Services Organizations, *Hispanic women's health: A nuestros numeros fact sheet*, Washington, DC: COSSMHO, 1996. National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996. Crews DE, in: Zane NWS, Takeuchi DT, Young KNJ (eds), *Confronting critical health issues of Asian and Pacific Islander Americans*, Thousand Oaks, CA: Sage, 1994, pp. 174-207. Brown ER, Wyn R, Cumberland WG, Yu H, Abel E, Gelberg L, Ng L, *Women's health-related behaviors and use of clinical preventive services: A report of The Commonwealth Fund*, Los Angeles: UCLA Center for Health Policy Research, 1996. Klatsky AL, Armstrong MA, Cardiovascular risk factors among Asian Americans living in northern California, *Am J Public Health* 1991; 81(11):1423-1428.

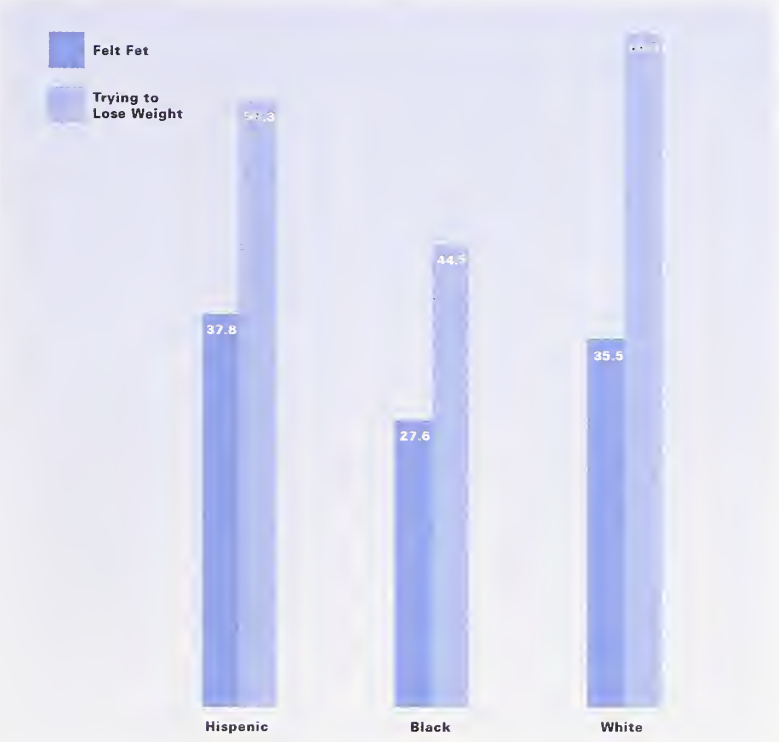
- Asian American women, in general, have the lowest rates of obesity. However, among subpopulations there is a range; 26 percent of Filipino American, 18 percent of Japanese American, and 13 percent of Chinese American women are obese (11).
- More Asian American women reported themselves to be underweight than any other group. In 1991, 30 percent of Asian American women self-reported they were underweight. White women were a distant second with 15 percent defining themselves as underweight followed by 9 percent of Hispanic women and 7 percent of black women (12).
- As income rises among both black and white women, the percent of obese women declines, the percent of normal weight women increases, and the percent of underweight women remains nearly constant. Fifty percent of black women and 31 percent of white women living in poverty in 1991 were obese, compared to 37 percent of black and 21 percent of white women with incomes three times the poverty level. The percent

of obese Hispanic women also decreased—from 43 percent to 23 percent—as Hispanic personal income rose. However, both the percent of normal weight and underweight Hispanic women increased by 11 percentage points and 9 percentage points, respectively, as income rose from below the poverty level (12).

Body Weight: Adolescent Females of Color

- Although there are no current rates for obesity and being underweight among female high school students, a national survey on youth reported that in 1995 more than one-third of young Hispanic and white females (38 percent and 36 percent, respectively) felt they were overweight, compared to 28 percent of young black females. The majority of white and Hispanic female high school students reported attempting to lose weight in 1995; 65 percent of whites, 58 percent of Hispanics, but only 45 percent of blacks reported this (14).
- Of those trying to lose weight, the vast majority attempted to do so by exercising (70 percent of white, 61 percent of Hispanic and 49 percent of black adolescent females). The second most popular method employed to lose weight among these young women was dieting. About half of Hispanics and whites (48 percent and 53 percent, respectively) but only about a third of blacks (32 percent) restricted their caloric intake to lose weight (14).
- While the use of laxatives, diet pills, and vomiting was not common for black females (4 percent), 11 percent of Hispanic females were actively taking laxatives and vomiting (purging), and 9 percent were ingesting diet pills to induce weight loss. One-tenth of white females took diet pills, and 8 percent attempted to lose weight by purging (14).

FIGURE 6
Body Image and Weight Loss Attempts Among Female Adolescents by Race/Ethnicity, 1994
Percent

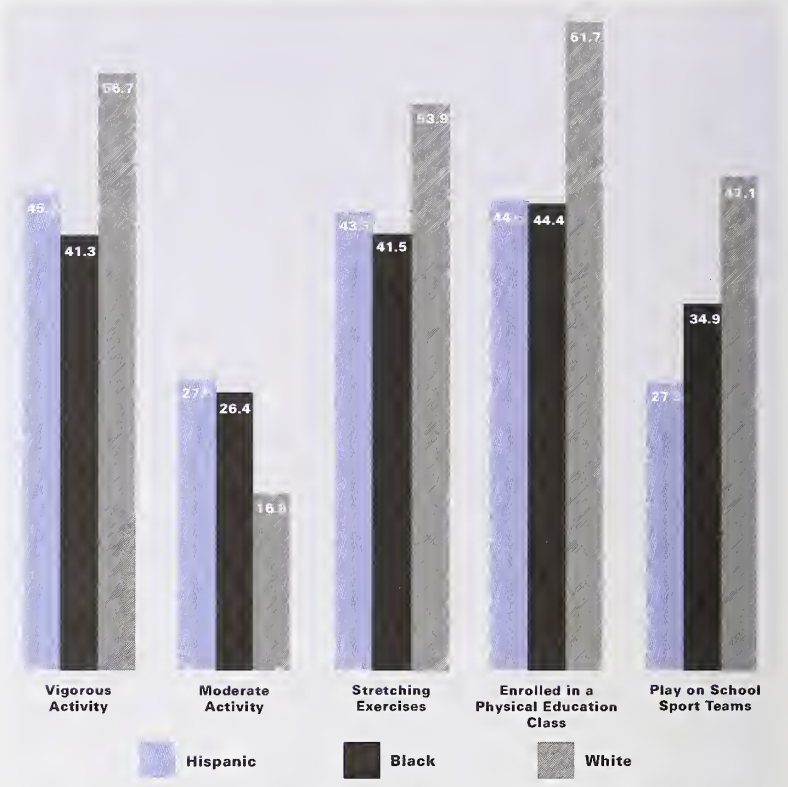


SOURCE: Kann L, Warren CW, Harris WA, Collins JL, Williams BI, Ross JG, Kolbe LJ, State and Local YRBSS Coordinators, Youth risk behavior surveillance—United States, 1995, *MMWR CDC Surveill Summ* September 27, 1996; 45(No.55-4).

Exercise

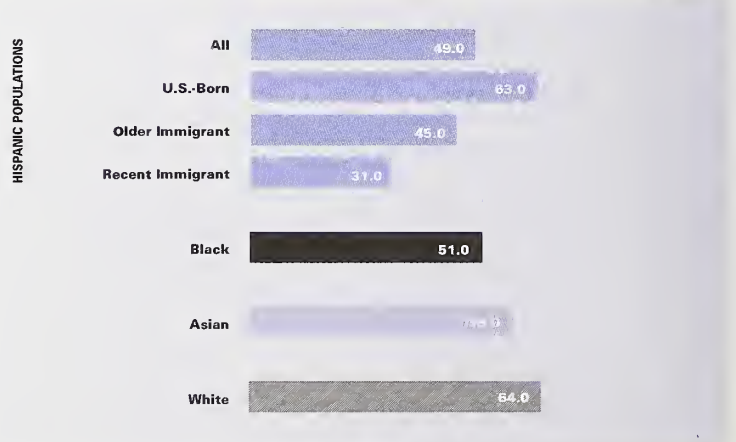
- According to a national youth survey conducted in 1995, 74 percent of white, 73 percent of Hispanic, and 68 percent of black high school females engaged in either moderate or vigorous physical activity several times a week. Moderate activity is defined as walking/bicycling no fewer than five days a week for half an hour each day. Vigorous activities are those that involve hard breathing and sweating at least three times a week for 20 minutes (14).
- Young white females were not only more likely to exercise, but 57 percent engaged in vigorous activity, compared to 45 percent of Hispanic females and 41 percent of black females. Meanwhile more than one quarter of blacks and Hispanics were regularly involved in moderate physical activity, compared to 17 percent of whites (14).
- Adult women exercised much less than their younger counterparts. In 1991, 69 percent of Hispanic female immigrants over 18 years of age did not exercise at all during the week; neither did 49 percent of black, 42 percent of Asian American, 37 percent of U.S.-born Hispanic, and 36 percent of white women (12).
- Nonetheless, between 30 percent and 40 percent of black, Asian American, white, and U.S.-born Hispanic adult women exercised at least three times per week. Only 16 percent of foreign-born Hispanic females who have resided in the United States for less than 15 years exercised more than twice a week (12).

FIGURE 7a
Percent of Female Adolescents by Race/Ethnicity Participating in Various Physical Activities, 1995



SOURCE: Kann L, Warren CW, Harris WA, Collins JL, Williams BI, Ross JG, Kolbe LJ, State and Local YRBSS Coordinators, Youth risk behavior surveillance—United States, 1995, *MMWR CDC Surveill Summ* September 27, 1996; 45(No.55-4).

FIGURE 7b
Percent of Women by Race/Ethnicity Exercising at Least Once Per Week, 1991



SOURCE: Brown ER, Wyn R, Cumberland WG, Yu H, Abel E, Gelberg L, Ng L, *Women's health-related behaviors and use of clinical preventive services: A report of The Commonwealth Fund,* Los Angeles: UCLA Center for Health Policy Research, 1996.

Cholesterol Levels

- Sometimes associated with obesity, high serum cholesterol (a factor in cardiovascular disease) was found in roughly equal proportions of the subpopulations of women of color between the ages of 20 and 74 years in 1988-1991. A fifth of white non-Hispanic, black non-Hispanic, and Mexican American women reported having high serum cholesterol, while 15 percent of urban American Indian/Alaska Native women also reported the condition (1,9).
- During the 1980s, 17 percent of Cuban women were reported to have high cholesterol, with 20 percent of Mexican American and 23 percent of Puerto Rican women reporting the same. More acculturated Mexican Americans had a greater incidence of high serum cholesterol, while less educated Mexican Americans and those living below the poverty line had lower levels (15).

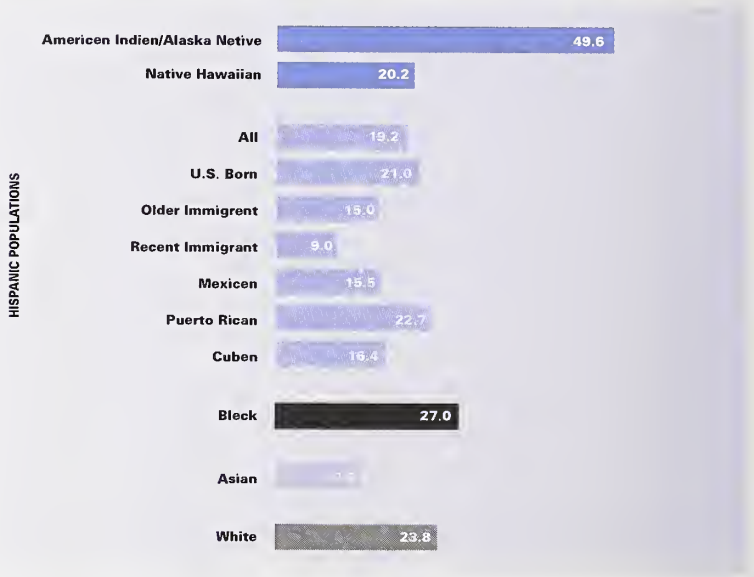
FIGURE 8
Percent of Women by Race/Ethnicity with High Serum Cholesterol, 1982-1984, 1988-1991

SOURCES: National Center for Health Statistics, *Health United States, 1995,* Hyattsville, MD: US Public Health Service, 1996. Delgado JL, Treviño FM, The state of Hispanic health in the United States, In *The state of Hispanic America Vol. II,* Oakland, CA: National Hispanic Center for Advanced Studies and Policy Analysis, 1985. Scott S, *Urban national plans to meet the year 2000 objectives,* St. Paul, MN: American Indian Health Care Association, 1991.

Tobacco Use Among Women of Color

- Current cigarette smoking among black and white females has declined since the late 1980s. However, recent cohorts of Hispanic and Asian American women have made little progress in reducing consumption or have actually increased it. Targeted advertising to minority groups by the tobacco industry may be associated with these trends (16,17).
- Although the data tend to differ slightly from survey to survey, the percentages of women ages 18 and over who reported "currently smoking cigarettes" in 1993 ranged from a low of 13 percent (Asian American women) to a high of 50 percent (American Indian/Alaska Native women). Black, white, Native Hawaiian, and Hispanic adult women were in the middle of this range (27 percent, 24 percent, 20 percent, and 19 percent, respectively) in reporting current smoking (18).
- Among Hispanic women in 1991, foreign-born women had the lowest rates of smoking. Only 15 percent of female immigrants who came to the United States more than 15 years ago and 9 percent of newer immigrants were current smokers, compared to 21 percent of U.S.-born Hispanic women. Between 1987 and 1991, 16 percent of Mexican American and Cuban women and 23 percent of Puerto Rican women reported that they smoked (12,19).
- Although 50 percent of American Indian women smoke cigarettes, 54 percent of those living on reservations have never smoked. In addition, smoking prevalence varies by reservation, from relatively low percentages in Arizona and New Mexico to highs of 50 percent among American Indians in the Plains states and more than 60 percent among Alaska Natives (8,18).
- Based on data from 1978-1985 and 1991, the prevalence of smoking among Asian American female subpopulations (18 years of age and older) ranged from a low of less than 1 percent among Vietnamese American women to a high of 19 percent among Japanese American women. It is estimated that 7 percent of Chinese American women, 11 percent of Filipino American women, and 13 percent of "other Asian" American women smoke (20).
- Asian American women are the most likely population to never try smoking. In 1993, 73 percent of Asian American women had never tried smoking, compared to 50 percent of Hispanic, 38 percent of black, 25 percent of white, and 13 percent of American Indian/Alaska Native women (18).
- On a daily basis, white women tend to smoke more than black and Hispanic women. More than 50 percent of black and Hispanic women smoke fewer than 10 cigarettes per day, compared to 24 percent of white women. More than one-fifth of white women smoke at least a pack (20 cigarettes) a day. In comparison, less than 10 percent of black and Hispanic women smoke more than 20 cigarettes in the course of one day (12).
- Smoking rates among women also differ by age group. While a large percentage of white females between the ages of 18 and 29 smoke (29 percent), the largest percentages of Hispanic and black females who smoke (17 percent and 31 percent, respectively) are between 30 and 64 years of age (12).
- Poor black and white women tend to smoke more than their wealthier counterparts. However, the same trend is not evident among Hispanic women who appear to smoke at a slightly higher rate as their incomes increase (12).
- Six percent of black, 5 percent of white, and 2 percent of Hispanic women have used smokeless tobacco at least once in their lifetimes. In 1995, approximately 1 percent of black and white

FIGURE 9
Percent of Women by Race/Ethnicity Who Currently Smoke, 1987 to 1993



SOURCES: The National Center on Addiction and Substance Abuse at Columbia University, Substance abuse and the American woman, New York: The National Center on Addiction and Substance Abuse, 1996. Haynes SG, Harvey C, Montes H, Nickens H, Cohen BH, Patterns of cigarette smoking among Hispanics in the United States: Results from the HHANES 1982-1984, *Am J Public Health* 1990; 80(suppl.):47-53. Klatsky AL, Armstrong MA, Cardiovascular risk factors among Asian Americans living in northern California, *Am J Public Health* 1991; 81(11):1423-1428. Tamir A, Cachola S, in: Zane NWS, Takeuchi DT, Young KNJ (eds), *Confronting critical health issues of Asian and Pacific Islander Americans*, Thousand Oaks, CA: Sage, 1994, pp. 209-247. Giovino GA, Schooley MW, Zhu B, Chrismon JH, Tomar SL, Peddicord JP, Merritt RK, Husten CG, Eriksen MP. Surveillance for selected tobacco-use behaviors–United States, 1900-1994. *MMWR CDC Surveill Summ.* November 18, 1994;43 (No. SS-3).

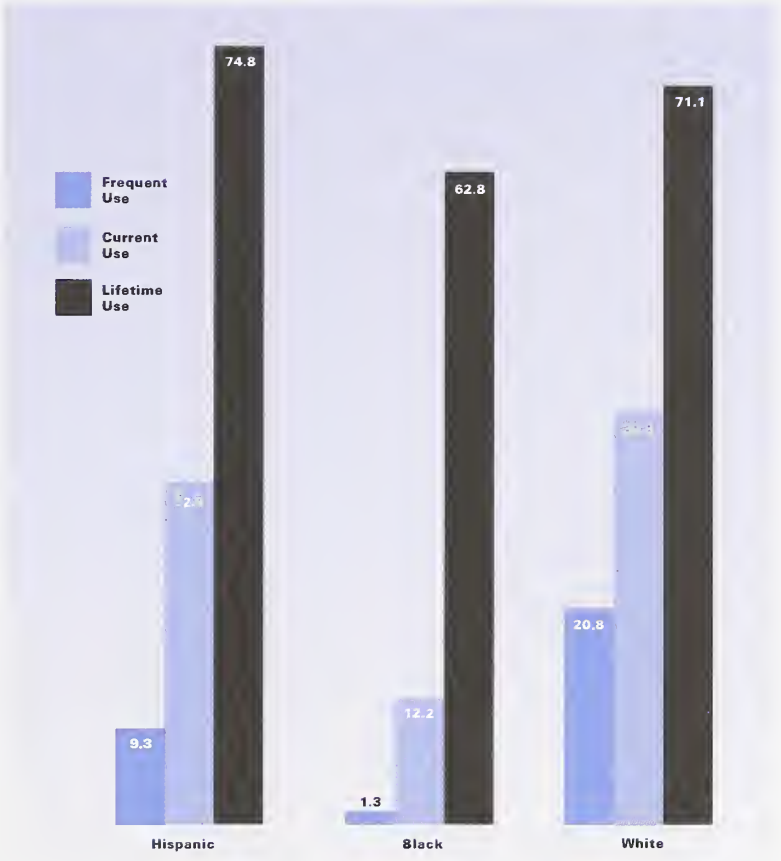
women and 0.1 percent of Hispanic women were current users of smokeless tobacco products (21).

- Very few women ever smoke cigars or pipes. Two-tenths of a percent of American Indian/Alaska Native women and 0.1 percent of all other women have engaged in these activities (19).
- The percent of women 45-64 years of age and 65 years and older who used chewing tobacco or snuff decreased considerably between 1970 and 1991. In 1970, 25 percent of black women and 12 percent of white women (65 years of age and older) chewed tobacco, compared to 6 percent of both black and white older women in 1991 (19).

Tobacco Use Among Adolescent Females of Color

- In the past, smoking was perceived as a male activity, but that picture is slowly changing. As of 1995, 71 percent of both young white females and males reported having used cigarettes over the course of their lifetimes. Seventy-five percent and 78 percent of high school female and male Hispanics reported having smoked at least once. The lifetime prevalence of smoking was lowest among young black women (63 percent), with the rate for black male youths somewhat higher (71 percent). Other national drug abuse surveys report even less difference between male and female adolescent smoking behavior (14,18).
- Although the purchase and use of cigarettes is illegal for all high school students until they turn 18 years of age, 40 percent of white, 33 percent of Hispanic, and 12 percent of black female high school students are current smokers. Furthermore, around a fifth of white (21 percent) and American Indian/Alaska Native (18 percent) females smoke frequently (at least 20 cigarettes per month) and/or daily. On the other hand, very few black females (1 percent) smoke as many cigarettes as their white counterparts. Hispanic females are in the middle; 9 percent smoke frequently (14,22).
- Before the age of 13, 24 percent of white, 20 percent of Hispanic, and 15 percent of black girls already have smoked an entire cigarette (14).
- A sizable share of white and Hispanic girls reported smoking cigarettes while on school property (18 percent and 14 percent, respectively) in 1995. Young black females not only were the least likely to smoke, but also were least likely to smoke at school (5 percent) (14).
- More than two times as many American Indian/Alaska Native adolescent females (8 percent) have used smokeless tobacco products as white and Hispanic (both 3 percent), and black (1 percent) young women (14,22).

FIGURE 10
Percent of Adolescent Females by Race/Ethnicity Who Use Cigarettes, 1995

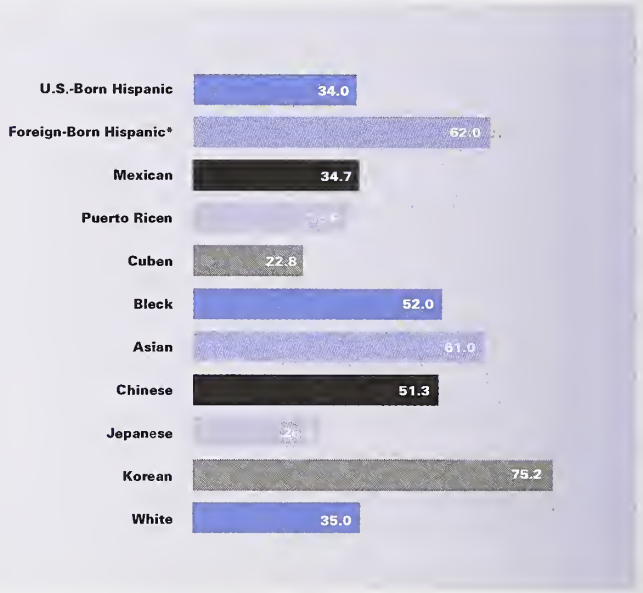


SOURCE: Kann L, Warren CW, Harris WA, Collins JL, Williams BI, Ross JG, Kolbe LJ, State and Local YRBSS Coordinators, Youth risk behavior surveillance—United States, 1995, *MMWR CDC Surveill Summ* September 27, 1996; 45(No.55-4).

Alcohol Consumption Among Women of Color

- Alcohol consumption becomes a factor in women's health if it is frequent and heavy enough to impair judgment, or if it places women at risk of accidents and abuse by others.
- Eighty-four percent of white women, 69 percent of black women, and 61 percent of Hispanic women have used alcohol at some point in their lives. Asian American women (61 percent) are more likely to abstain from alcohol than are black women (52 percent), Hispanic women (49 percent), and white women (35 percent) (12,23).
- Rates of alcohol consumption differ among Hispanic subpopulations. The percentage of women reporting that they are current alcohol users ranges from 35 percent among Mexican Americans and 33 percent among Puerto Ricans to 23 percent among Cubans. On the other hand, 62 percent of foreign-born Hispanic women abstain from using alcohol (12).
- Among Asian Americans and Native Americans, considerable variation exists in the likelihood both of alcohol consumption and of reporting symptoms of alcoholism. Native Hawaiian women are more likely to drink alcohol than women of Filipino, Chinese, or Japanese descent who reside in Hawaii (24).
- One study comparing three Asian American subpopulations found that larger proportions of Japanese American women were heavy and moderate drinkers (12 percent and 13 percent, respectively) than were Korean American women (0.8 percent and 2 percent, respectively). In addition, no Chinese American women reported heavy drinking, and only 10 percent reported that they were moderate drinkers. More than one-quarter of Japanese American women, half of Chinese American women, and three-quarters of Korean American women abstained from alcohol consumption (25).
- While the majority of adult women are not problem drinkers, a small proportion drink either frequently or heavily. More white women (17 percent) were frequent drinkers of alcohol in 1995 than were black (11 percent) or Hispanic women (5 percent). A national survey conducted in 1993 found that between 2 and 3 percent of black, American Indian/Alaska Native, and white women, and just under 1 percent of Hispanic and Asian American women consumed at least 60 drinks within 30 days (18,21).

FIGURE 11
Percent of Women by Race/Ethnicity Abstaining from Alcohol Consumption, 1985, 1991, 1993



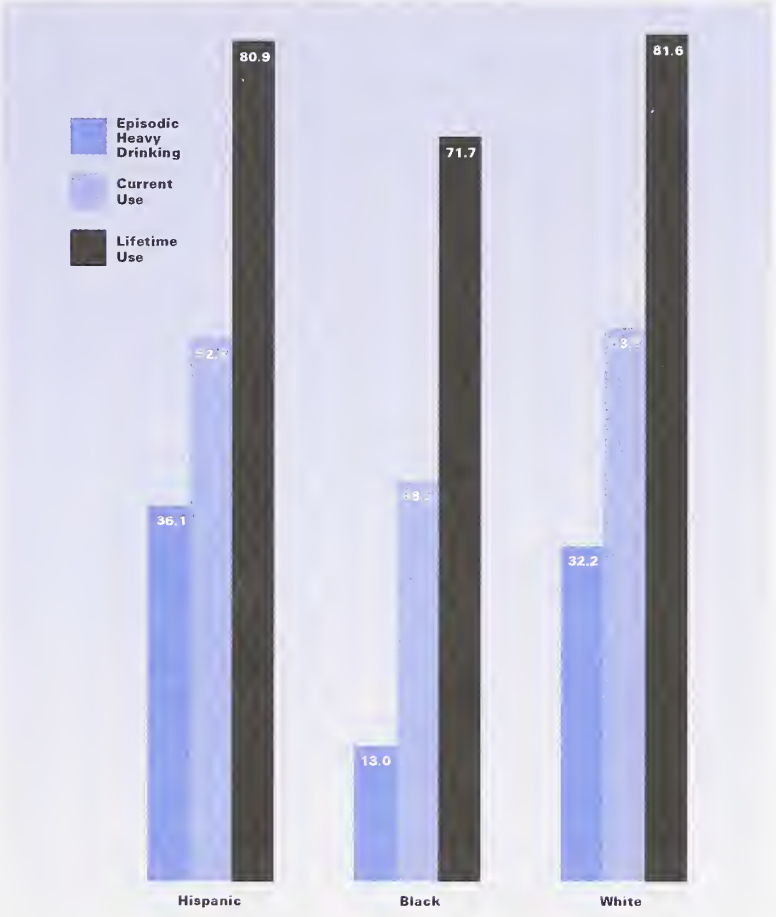
* Living in the United States for less than 15 years

SOURCES: Brown ER, Wyn R, Cumberland WG, Yu H, Abel E, Gelberg L, Ng L, *Women's health-related behaviors and use of clinical preventive services: A report of The Commonwealth Fund,* Los Angeles: UCLA Center for Health Policy Research, 1996. Chi I, Lubben JE, Kitano H, Differences in drinking behavior among three Asian-American groups, *J Stud Alcohol* 1989; 50(1):15-23. Marks G, Garcia M, Solis JM, Health risk behaviors of Hispanics in the United States: Findings from HHANES, 1982-1984, *Am J Public Health* 1990; 80 (suppl.):20-26.

Alcohol Consumption Among Adolescent Females of Color

- While alcohol is a legal substance for adults (21 years of age), it is an illegal substance for youth. Nevertheless, the vast majority of black, Hispanic, and white female high school students have consumed alcohol (14).
- Young black females had the lowest lifetime prevalence of alcohol use (72 percent versus 82 percent of white and 81 percent of Hispanic females). Thirty-nine percent of black adolescent females reported recently consuming an alcoholic beverage, compared to more than half of Hispanic and white high school girls (52 percent and 53 percent, respectively) (14).
- The rates of heavy drinking—consuming five or more drinks at one time—are highest among Hispanic (36 percent) and white (32 percent) female students. Thirteen percent of black female youth have engaged in alcohol consumption of this kind (14).
- Nine percent of American Indian/Alaska Native girls in junior high school drink alcohol frequently, compared to 14 percent of American Indian/Alaska Native high school female youth. However, 60 percent of American Indian/Alaska Native students, female and male combined, report they never drink, and 20 percent consume alcohol infrequently (22).
- Less than one-third of white, black, and Hispanic high school females reported first consuming a sizable amount of alcohol before 13 years of age (24 percent, 30 percent, and 32 percent, respectively) (14).

FIGURE 12
Percent of Adolescent Females by Race/Ethnicity Consuming Alcohol, 1995



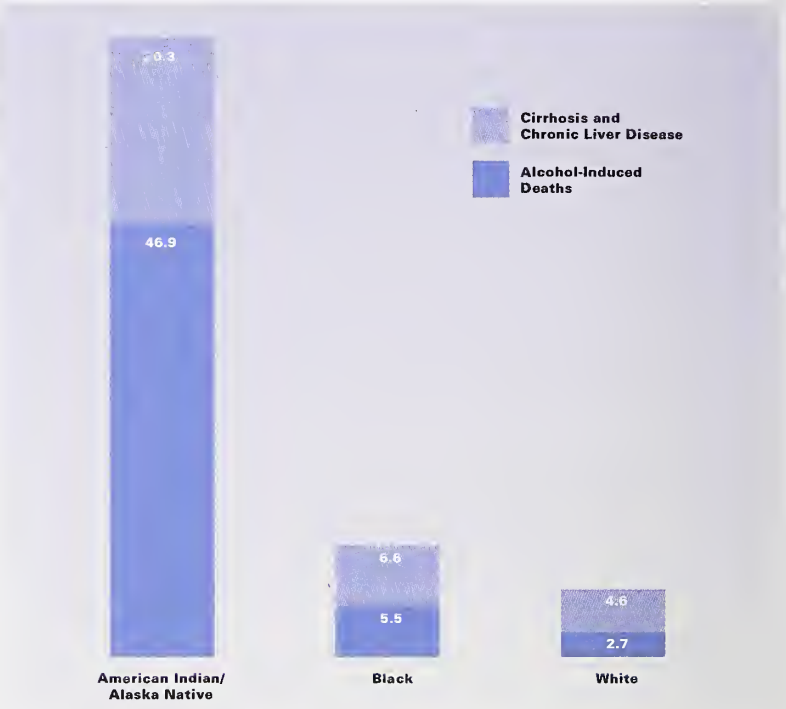
SOURCE: Kann L, Warren CW, Harris WA, Collins JL, Williams BI, Ross JG, Kolbe LJ, State and Local YRBSS Coordinators, Youth risk behavior surveillance—United States, 1995, *MMWR CDC Surveill Summ* September 27, 1996; 45(No.55-4).

- Fourteen percent of Hispanic and white female high school students have driven an automobile under the influence of alcohol, compared to 5 percent of black female students. An even higher percentage of female youth have ridden in a vehicle whose driver had recently consumed alcohol (50 percent of Hispanics, 37 percent of whites, and 33 percent of blacks) (14).

Alcohol-Related Deaths

- In 1991, mortality rates related to alcoholism were high among American Indian/Alaska Native populations. The alcohol-related death rate for American Indian/Alaska Native males (55-64 years of age)was 139 per 100,000, compared to a rate of 33 per 100,000 for white men. Fewer than 10 deaths per 100,000 white females of all ages were induced by alcohol. However, alcohol-related deaths among American Indian/Alaska Native women were significantly higher, ranging from 21 deaths per 100,000 for those 25 to 34 years old to 65 deaths per 100,000 for those 45 to 54 years old (26).
- The alcohol-induced death rates for black and white women in 1993 were very small (nearly 6 per 100,000 black women and nearly 3 per 100,000 white women) (1).
- Chronic liver disease and cirrhosis are two conditions often related to the consumption of excessive amounts of alcohol. Based on data from 1990-1992 and 1993, more than 20 American Indian/Alaska Native women per 100,000 died from liver disease and cirrhosis, compared to nearly 7 deaths per 100,000 black females and nearly 5 deaths per 100,000 white females (1).

FIGURE 13
Alcohol-Related Deaths Among Women by Race/Ethnicity, 1990-1992,1993
Per 100,000 Population

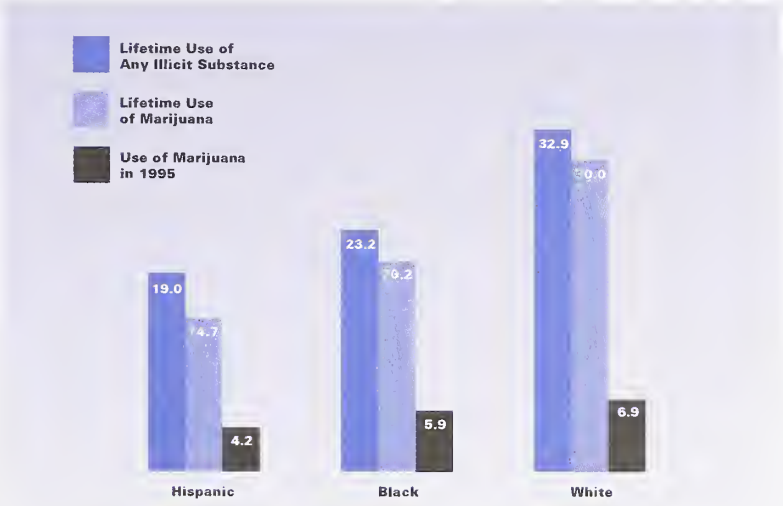


SOURCE: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996.

Use of Marijuana and Other Substances by Women of Color

- More white women (33 percent) and black women (23 percent) report having used illicit drugs at some point in their lives than do Hispanic women (19 percent). Five percent of white women, 4 percent of black women, and 3 percent of Hispanic women reported using an illegal substance during the month before they were surveyed in 1995 (21).
- White women have tried more illicit substances in their lifetimes than either black or Hispanic women. They also reported more recent use of marijuana, inhalants, hallucinogens, tranquilizers, sedatives, and analgesics than other women (21).
- Marijuana is the most popular illicit substance used by women. Nearly one-third of white women (30 percent), one-fifth of black women (20 percent), and nearly 15 percent of Hispanic women have used marijuana at least once in their lifetimes (21).
- Forty-eight percent of black and 38 percent of white women who regularly used illegal substances reported using marijuana. Less than 10 percent of white, black, and Hispanic women, however, reported smoking marijuana in 1995 (7 percent, 6 percent, and 4 percent, respectively). However, few white (3 percent), black (3 percent), or Hispanic (2 percent) women used marijuana in the 30 days prior to being surveyed (18,21).

FIGURE 14
Percent of Women by Race/Ethnicity Who Use Marijuana and Other Substances, 1995



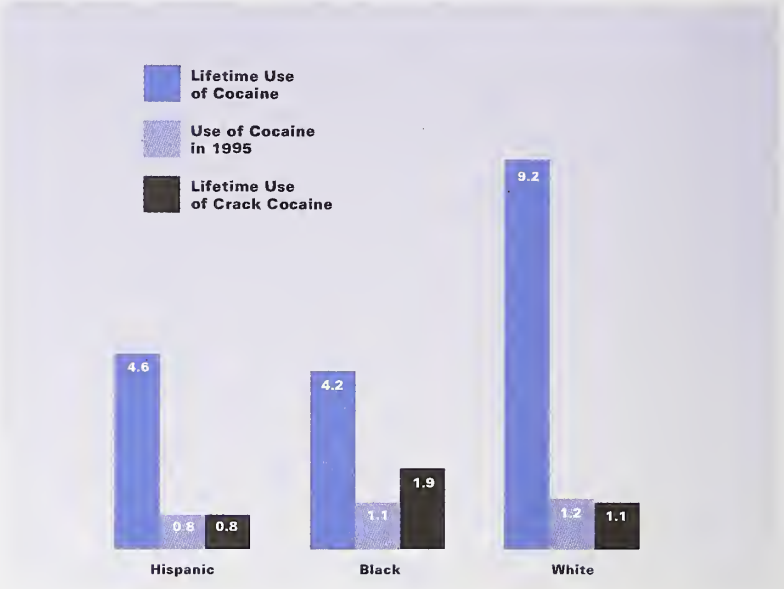
SOURCE: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, *National household survey of drug abuse: Population estimates 1995,* US DHHS publication no. (SMA) 96-3095, Rockville, MD: US Public Health Service, 1996.

- Three percent of white and black women smoked marijuana at least 12 times a year, compared to 1 percent of Hispanic women. Two percent of white and black females and 1 percent of Hispanic women smoked marijuana more than 50 times a year (21).
- Hallucinogens and inhalants were most frequently used by white (9 percent and 4 percent, respectively) and Hispanic (4 percent and 2 percent, respectively) females. Less than 2 percent of black females reported ever trying hallucinogens or inhalants in their lifetimes (21).
- Fewer than one in 20 women have ever taken stimulants (4 percent of whites, nearly 2 percent of Hispanics, and less than 1 percent of blacks) (21).
- One-tenth of white women have tried psychotherapeutic drugs compared to 6 percent of Hispanic and 5 percent of black females (21).

Cocaine and Crack Use By Women of Color

- Although more white and Hispanic women have tried cocaine, black women are more likely to be recent and frequent users of cocaine, especially crack cocaine (21).
- Data from 1993 suggest that 5 percent of black and approximately 3 percent of both Hispanic and white women are regular users of illegal substances. Among females regularly using drugs, 52 percent and 23 percent of blacks and whites, respectively, regularly use cocaine (18).
- Five percent of Hispanic and 4 percent of black women have ingested cocaine at least once in their lifetimes; nearly twice as many white women (9 percent), however, have used this drug. Although more white women have a history of cocaine use, approximately 1 percent each of white, black, and Hispanic women reported current use of this substance in 1995. Among these current users, one half of black women and one-tenth of both Hispanic and white women reported using cocaine on at least 51 occasions/days during the year (21).
- Far fewer women of all races have ever tried crack, a more addictive form of cocaine. Two percent of black women and 1 percent of both Hispanic and white women have used crack at least once in their lifetimes. Two-tenths of black women, as well as one-tenth of both white and Hispanic women, who reported having used crack at least once in their lifetimes also reported ingesting crack in the month prior to being surveyed (21).

FIGURE 15
Percent of Women by Race/Ethnicity Who Use Cocaine and Crack Cocaine, 1995

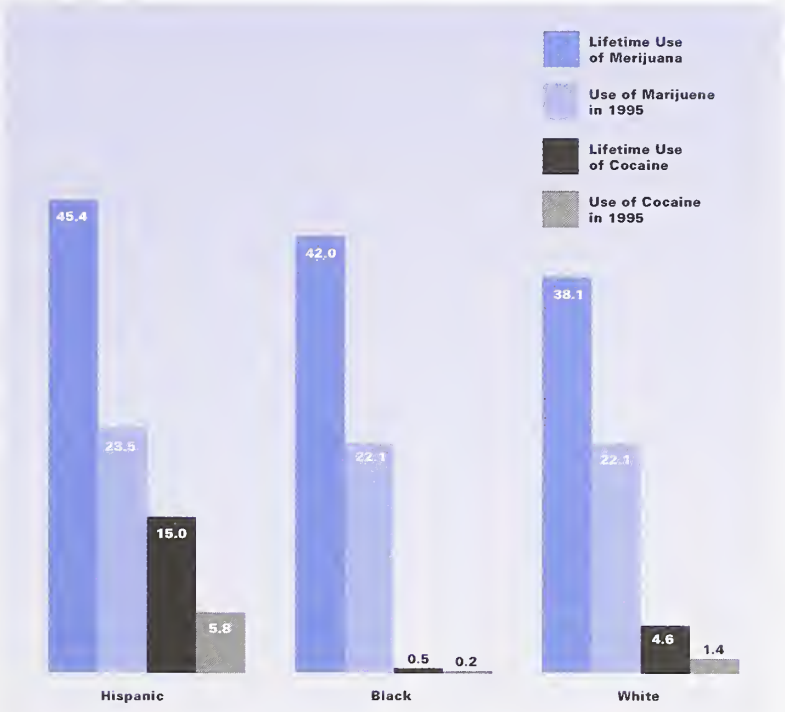


SOURCE: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, *National household survey of drug abuse: Population estimates 1995,* US DHHS publication no. (SMA) 96-3095, Rockville, MD: US Public Health Service, 1996.

Use of Illicit Substances by Adolescent Females of Color

- Drug use among American youth has increased dramatically. In 1995, 45 percent of Hispanic, 42 percent of black, and 38 percent of white female high school students reported having used marijuana at least once in their lifetimes. Slightly less than a quarter of young black, Hispanic, and white females were current users of marijuana at the time of the survey. More than 30 percent of American Indian/Alaska Native junior high students and half of high school students (female and male combined) have experimented with marijuana (14,22).
- In 1993, there were 224,526 drug abuse emergency room episodes among females. White women were involved in 60 percent of these episodes, followed by black (22 percent) and Hispanic (9 percent) women. Between 18 percent and 23 percent of all drug abuse emergency room episodes among white, Hispanic, and black females involved young women (12-17 years of age) (27).
- Except for marijuana use, black female high school students have a lower prevalence of substance use than either Hispanic or white female youth. Young Hispanic females had the highest lifetime use of cocaine, glue (for sniffing), and other illegal substances, such as heroin and LSD (14).
- Among female adolescents, the percentages of lifetime and current users of cocaine were highest for Hispanics (15 percent and 6 percent, respectively). Five percent of white female adolescents had tried cocaine during the course of their lifetimes, and more than 1 percent were current users. Less than 1 percent of black high school females had ever tried cocaine, and even fewer were current users. Twelve percent of young Hispanic females, 3 percent of white females, and less than 1 percent of black adolescent females had ever tried freebasing or using crack cocaine (14).
- Less than one-tenth of high school females first used marijuana before the age of 13 (9 percent of Hispanics, 7 percent of blacks, and 3 percent of whites) (14).
- Virtually all of the young black, Hispanic, and white females who have tried cocaine did so initially as teenagers (13 years of age or older) (14).
- Twenty-two percent of Hispanic, 20 percent of white, and 9 percent of black female youths attempted to get high by sniffing either glue or the contents of certain aerosol spray cans (14).
- As of 1995, only 2 percent of black adolescent females had experimented with other illegal substances (e.g., heroin, PCP), compared to 17 percent of both Hispanic and white high school girls (14).

FIGURE 16
Percent of Adolescent Females by Race/Ethnicity Who Use Marijuana and Cocaine, 1995

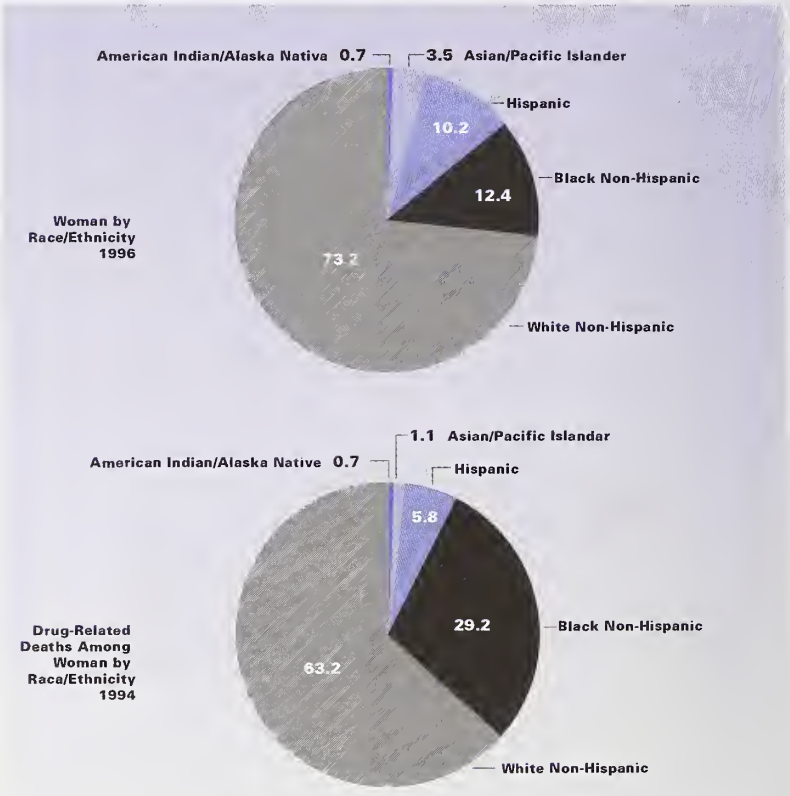


SOURCE: Kann L, Warren CW, Harris WA, Collins JL, Williams BI, Ross JG, Kolbe LJ, State and Local YRBSS Coordinators, Youth risk behavior surveillance—United States, 1995, *MMWR CDC Surveill Summ* September 27, 1996; 45(No.55-4).

Drug-Related Deaths

- Although non-Hispanic black females represent 12 percent of the female population, they accounted for 29 percent of the drug-related deaths in 1994. The remaining 71 percent of drug-related deaths were distributed as follows: whites (63 percent), Hispanics (nearly 6 percent), Asian Americans (1 percent), and American Indians/Alaska Natives (less than 1 percent) (28).
- In 1991, drug-related mortality rates among American Indian/Alaska Native females ranged from a low of nearly 3 per 100,000 for those ages 15 to 24 and 55 to 64 to a high of about 8 per 100,000 for those ages 75 to 84. In 1993, the age-adjusted drug-induced death rate was more than 4 per 100,000 black females and nearly 3 per 100,000 white females (1,26).
- Among those women who died due to drug use in 1994, 70 percent of the black women, 57 percent of the white women, and 56 percent of the Hispanic women were between 26 and 44 years of age at the time of their deaths. More than one-third of white (35 percent), 23 percent of black, and 22 percent of Hispanic women who died were 45 years of age or older (28).
- Eighteen percent of Hispanic females whose deaths were drug-induced were between 18 and 25 years of age, compared to 7 percent of black women and 6 percent of white women (28).

FIGURE 17
Distribution of Women by Race/Ethnicity, 1996, vs. Distribution of Drug-Related Death Among Women by Race/Ethnicity, 1994

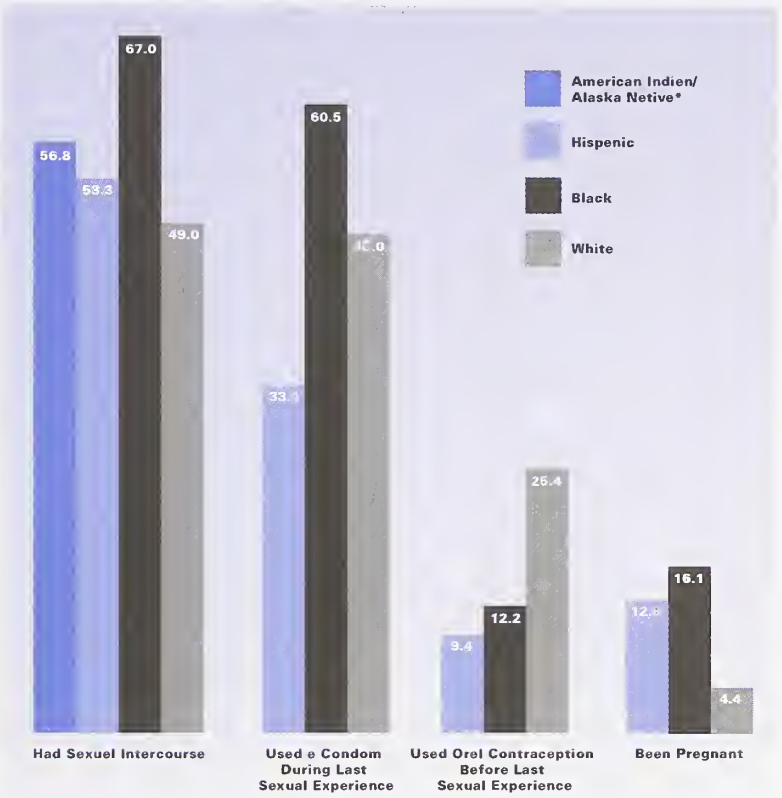


SOURCES: Bureau of the Census, *US population estimates by age, sex, race, and Hispanic Origin, 1990-1995, with associated tables for recent months*, Population Division Release PPL-41, 1996. Substance Abuse and Mental Health Services Administration, Office of Applied Studies, *Annual medical examiner data 1994: Data from the Drug Abuse Warning Network*, US DHHS publication no. (SMA) 96-3078, Rockville, MD: US Public Health Service, 1996.

Sexual Behavior: Adolescent Females of Color

- As of 1995, 67 percent of black, 57 percent of American Indian/Alaska Native, 53 percent of Hispanic, and 49 percent of white high school females reported having had sex at least once in their lifetimes. On average American Indian/Alaska Native girls first had intercourse at age 14. Ten percent of black, 5 percent of Hispanic, and 4 percent of white females were less than 13 years of age during their first sexual experience (14,22).
- Nearly 40 percent of sexually active Hispanic and white, as well as 51 percent of black female high school students, reported currently having sex. In comparison, between 22 percent and 26 percent of black, white, and Hispanic women who had previously engaged in sexual activities were currently abstaining from intercourse. Forty-nine percent of sexually active American Indian/Alaska Native adolescent females reported having sex infrequently or rarely (14,22).
- When asked whether they had taken a birth control pill or used a condom during their last sexual encounter, 61 percent of black high school females reported using a condom, and 25 percent of white high school females reported taking birth control pills. Forty-eight percent and 33 percent, respectively, of young white and Hispanic females used a condom during their last sexual encounter. Oral contraception was used by 12 percent of black and 9 percent of Hispanic high school females (14,22).
- The majority of sexually active young American Indian/Alaska Native women have used some method of contraception. Nearly one-quarter of American Indian/Alaska Native female youth (23.6 percent) reported that condoms were their preferred form of contraception, while another 18.3 percent reported that they used birth control pills. However, 39 percent have never used any form of protection during intercourse (22).
- Since a large proportion of high school students are not practicing safer sex on a regular basis, it is not surprising that 16 percent of black, 13 percent of Hispanic, and 4 percent of white female high school students reported having been pregnant (14).
- The use of drugs and alcohol prior to their last sexual encounter was highest among young Hispanic women (22 percent). Eighteen percent and 11 percent of white and black female high school students, respectively, also used illegal substances during their most recent sexual experience (14).

FIGURE 18
Sexual Behavior of Adolescent Females by Race/Ethnicity, 1995
Percent



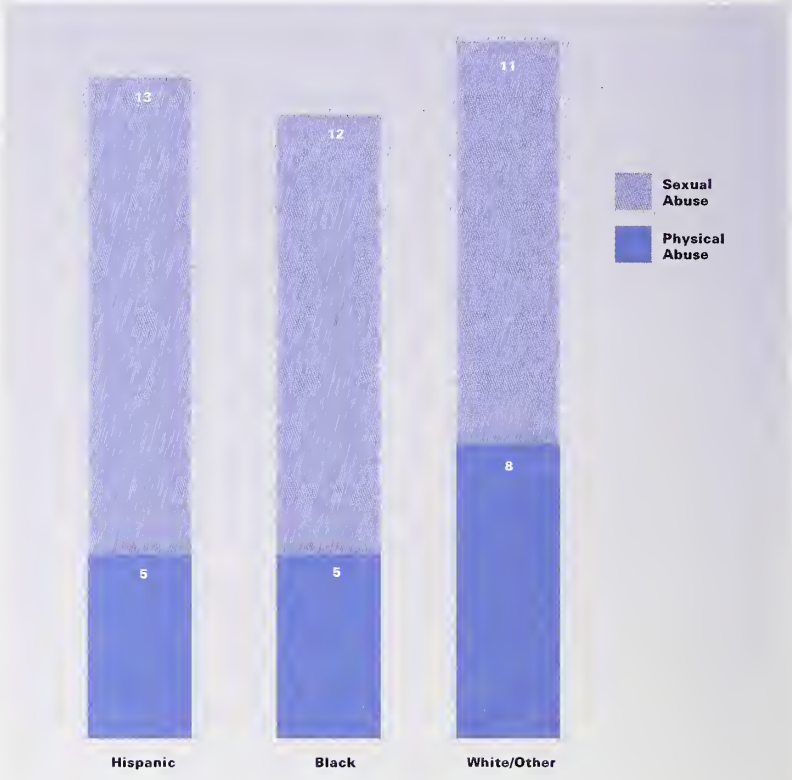
* Data from 1989

SOURCES: Kann L, Warren CW, Harris WA, Collins JL, Williams BI, Ross JG, Kolbe LJ, State and Local YRBSS Coordinators, Youth risk behavior surveillance—United States, 1995, *MMWR CDC Surveill Summ* September 27, 1996; 45(No.55-4). Blum RW, Harmon B, Harris L, Bergeisen L, Resnick MD, American Indian-Alaska Native youth health, *JAMA* 1992; 267(12):1637-1644.

Physical/Sexual Abuse

- A larger percentage of white/other groups of women (8 percent) than of either black (5 percent) or Hispanic (5 percent) women reported (in 1993) having been physically abused as a child (29).
- Sexual abuse as a child was reported (in 1993) more frequently than physical abuse as a child by all women. Eleven percent of white/other women, 12 percent of black women, and 13 percent of Hispanic women reported sexual abuse as a child (29).
- Hispanic women (12 percent) were more likely to report (in 1993) a violent crime (other than rape) than were either white/other women (9 percent), or black women (8 percent) (29).
- Black women (16 percent) were more likely to report (in 1993) having experienced any form of spousal abuse than were either white/other or Hispanic women. Ten percent of Hispanic women and 8 percent of white/other women also reported this form of abuse (29).

FIGURE 19
Percent of Women by Race/Ethnicity Who Reported Physical and Sexual Abuse as a Child, 1993

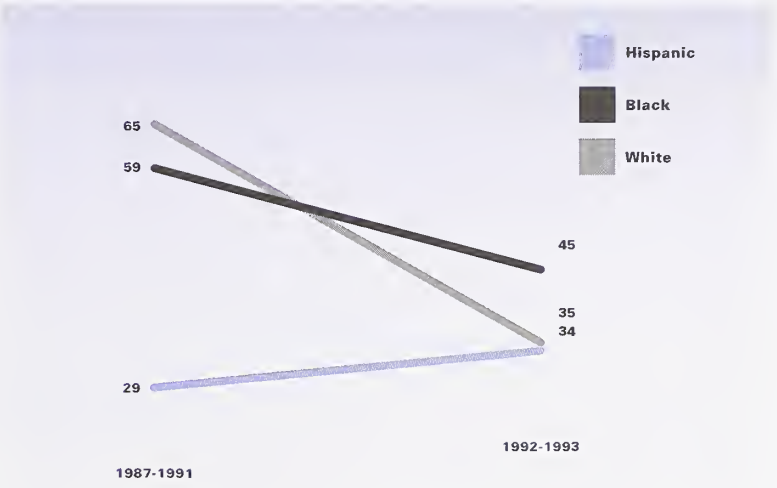


SOURCE: Plichta SB, in: Falik MM, Collins KS (eds), *Women's health: The Commonwealth Fund survey*, Baltimore, MD: Johns Hopkins University Press, 1996, pp. 237-270.

Violence

- Between 1987 and 1991, the rate of violent crimes against women was the highest against white women (65 per 1,000), followed by blacks (59 per 1,000) and then Hispanics (29 per 1,000) (30). (Violent crimes are defined to include rapes, sexual assaults, robberies, and both aggravated and simple assaults.) In 1992-1993, however, the total rate of violent victimization showed greater victimization among black women (45 cases per 1,000) than among either white women (35 cases per 1,000) or Hispanic women (34 cases per 1,000) (31).
- The reported incidence of rape per 1,000 females in 1987-1991 was higher for black women (2 per 1,000 females) than for either white or Hispanic women (1 per 1,000 women for each group) (30). A 1993 survey suggests a somewhat different trend, however. A larger percentage of both Hispanic (4 percent) and white/other women (3 percent) than of black women (2 percent) reported having been raped (29).
- Aggravated assault was more common among black and Hispanic women than among white women between 1987 and 1991. Reports of aggravated assault were filed by 8 black women and 7 Hispanic women (per 1,000 women), while 5 white women per 1,000 reported the same during this time period (30).
- Assailants of white, black, and Hispanic women were sometimes either an intimate, a relative, or a friend/acquaintance of the victim of the violence. Between 1992 and 1993, in 13 violent victimizations per 1,000 white women, 17 violent victimizations per 1,000 black women, and 10 violent victimizations per 1,000 Hispanic women, the assailant was an acquaintance or friend. In 9 violent victimizations per 1,000 white women, 11 violent victimizations per 1,000 black women, and 7 violent victimizations per 1,000 Hispanic women, the assailant was an intimate (31).

FIGURE 20
Violent Crimes or Victimization, Among Women by Race/Ethnicity, 1987-1991 and 1992-1993
Per 100,000 Population



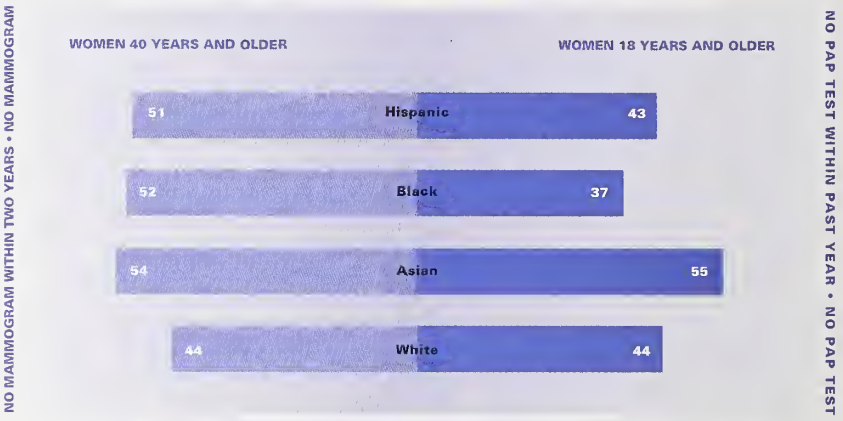
SOURCES: Bachman R, *Violence against women: A national crime victimization survey report*, Publication no. NCJ-145325, Washington, DC: US Department of Justice, 1994. Bachman R, Saltzman LE, *Violence against women: Estimates from the redesigned survey*, Publication no. NCJ-154348, Washington, DC: US Department of Justice, 1995.

Preventive Health Care Services

Preventive Health Measures

- Women of color often do not avail themselves of preventive health tests such as Pap smears and breast exams. For all women, being married and having a high school education are associated with higher screening rates. The likelihood of getting these preventive tests, however, declines with age (1,29).
- Among women 18 years of age and older, sizable proportions of all women reported (in 1991) that they had not had a Pap test within the past year. Thirty-seven percent of black women, 43 percent of Hispanic women, 44 percent of white women, and 55 percent of Asian women reported no Pap test in the past year (12). These proportions generally were lower for the younger age group (18-39 years) and higher for the older age groups (40-64 years and 65 years and older).
- Five percent of each of these groups of women—white non-Hispanic, black non-Hispanic, and American Indian/Alaska Native—reported (during the 1991-1993 period) ever having had an abnormal Pap smear. Four percent of Hispanics and 2 percent of Asians also reported an abnormal Pap smear (32).
- Sizable shares of women of color 40 years of age and older in 1991 reported not having had a mammogram in the past two years (at that time, the standard for this test for women 40-50 years of age). Although 44 percent of white women reported not getting this test, over half of Hispanic (51 percent), black American (52 percent), and Asian American (54 percent) women reported not having a mammogram in the past two years (12).
- At 8 percent, both white non-Hispanic and black non-Hispanic women reported the largest proportions with abnormal mammograms in the 1991-1993 period. Equal shares of Hispanic and American Indian/Alaska Native women (both at 7 percent) also reported abnormal mammograms, as did 4 percent of Asian women (32).
- Although breast, lung, and cervical cancer commonly occur in Asian American women, approximately two-thirds of immigrant Asian women have never had Pap smears and roughly 70 percent have never had mammograms (33). In answer to the question, "When was your last Pap smear," only 43 percent of Asian and Pacific Islander American women reported "less than a year ago," the smallest share among all women of color. Only 47 percent of Asian and Pacific Islander American women (who were 45 years of age and older) reported ever having a mammogram (34).
- Nearly 83 percent of American Indian/Alaska Native women on reservations (as opposed to more than 90 percent of all U.S. women) have had at least one Pap test. Among American Indian/Alaska Native women on reservations, 78 percent reported ever having had mammography, while 89 percent of urban American Indian/Alaska Native women reported the same (8,9). Only 10 percent of urban American Indian/Alaska Native women reported never having had a Pap smear.

FIGURE 21
Percent of Women by Race/Ethnicity Who Lack Preventive Health Testing, 1991

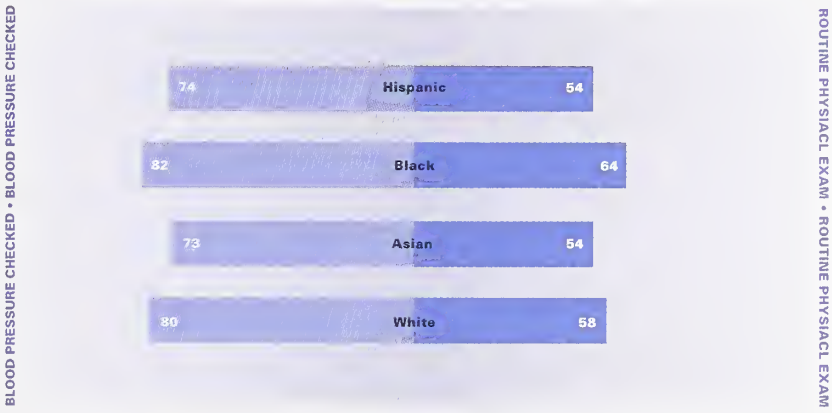


SOURCE: Brown ER, Wyn R, Cumberland WG, Yu H, Abel E, Gelberg L, Ng L, *Women's health-related behaviors and use of clinical preventive services: A report of The Commonwealth Fund*, Los Angeles: UCLA Center for Health Policy Research, 1996.

Physical Exams

- In 1991, black women were the most likely to report having had a routine physical exam within the past 12 months (64 percent), followed by white women (58 percent), and Asian American and Hispanic women (both 54 percent) (12).
- Eighteen percent of Asian American women indicated that they either had not had a physical exam in the past three years or had never had such an examination. Sixteen percent of white women, 15 percent of Hispanic women, and 10 percent of black women reported this same lack of an exam (12).
- Less than 50 percent of Mexican American women surveyed in the Hispanic Health and Nutrition Examination Survey (HHANES) (1982-1984) reported having had a routine physical within the last two years. Approximately 20 percent reported never having had a regular physical exam (35).
- Just under three-quarters of Hispanic and Asian American women surveyed in 1991 had their blood pressure measured in the preceding 12 months (74 percent and 73 percent, respectively), compared to 80 percent of white women and 82 percent of black women (12).

FIGURE 22
Percent of Women by Race/Ethnicity Having Their Blood Pressure Checked and a Physical Exam in the Past Year, 1991

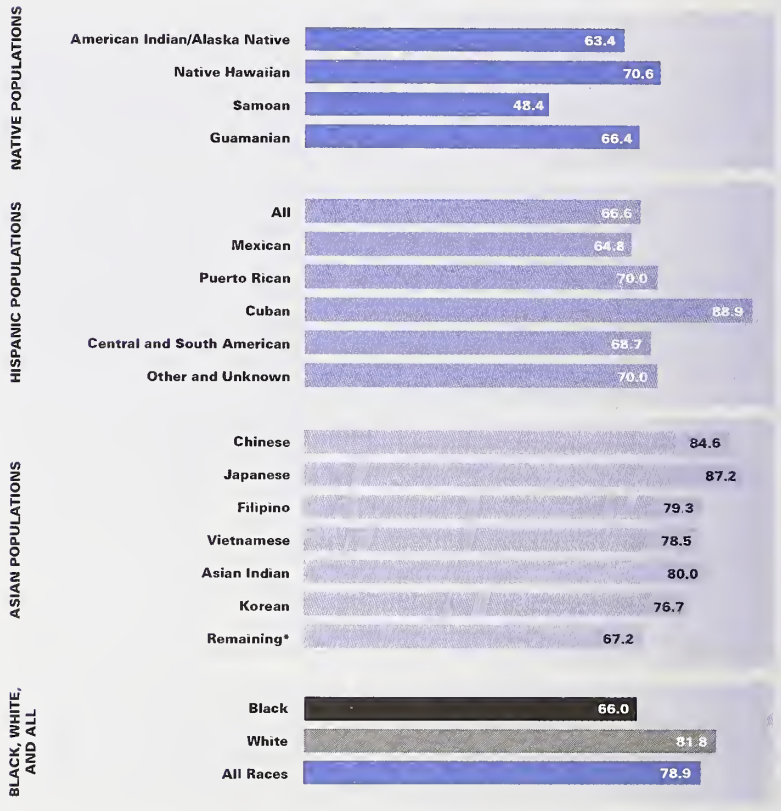


SOURCE: Brown ER, Wyn R, Cumberland WG, Yu H, Abel E, Gelberg L, Ng L, *Women's health-related behaviors and use of clinical preventive services: A report of The Commonwealth Fund*, Los Angeles: UCLA Center for Health Policy Research, 1996.

Prenatal Care

- Although starting prenatal care as early as possible during a pregnancy is believed to foster the most healthful birth outcomes for both mothers and infants, sizable shares of mothers-to-be of color do not initiate prenatal care during the first trimester. Nearly 52 percent of Samoan mothers do not start prenatal care in the first trimester, the largest share among all women (36).
- More than a third of mothers-to-be who are black, American Indian/Alaska Native, Guamanian, and Mexican American also do not begin prenatal care during the first trimester of pregnancy (1,36).
- Large majorities of other mothers-to-be of color initiate prenatal care during the first trimester. In fact, many women of color are more likely to get early prenatal care than white women, of whom 82 percent get such care. Nearly 90 percent of Cuban mothers-to-be receive prenatal care beginning in the first trimester. Large proportions of mothers-to-be of several Asian American populations also begin prenatal care in the first trimester—Japanese (87 percent), Chinese (85 percent), and Asian Indian (80 percent) (1,36).
- As would be expected, the population groups with the largest shares not initiating prenatal care during the first trimester also report the largest shares who get no prenatal care or who start it during the third trimester. Women who receive late or no prenatal care are more likely to be poor, adolescent, unmarried, rural dwellers, or over 40 years of age—characteristics that place their pregnancies at high risk from other causes as well (37).

FIGURE 23
Percent of Mothers by Race/Ethnicity Who Initiate Prenatal Care During First Trimester, 1992, 1993



* Includes Cambodian, Hmong, Laotian, Thai, and other Asian groups not listed separately

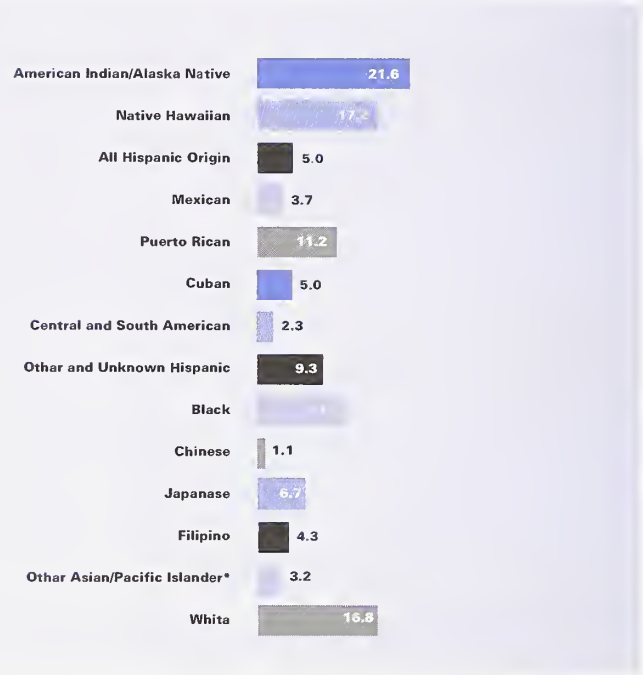
SOURCES: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996. Martin JA, Birth characteristics for Asian or Pacific Islander subgroups, 1992, *Monthly Vital Statistics Report* 1995; 43(10),Supplement.

- Ten percent of American Indian/Alaska Native and Mexican American mothers-to-be and 9 percent of black mothers-to-be reported getting no prenatal care or starting care in their third trimester. Seven percent of each of the following groups of women also reported this failure to use preventive services to their fullest—Hawaiian/part Hawaiian, Puerto Rican, Central and South American, and other and unknown Hispanics (1).
- In California, the following women usually receive late or no prenatal care: 59 percent of Samoans, 48 percent of Laotians, 47 percent of Cambodians, 32 percent of Vietnamese, and 25 percent of women of all racial groups combined (38).

Substance Use During Pregnancy

- Smoking during pregnancy was reported by more than a fifth (22 percent) of American Indian/Alaska Native mothers-to-be. Equal shares (17 percent) of white and Hawaiian/part Hawaiian mothers-to-be also reported this unhealthful behavior. Other mothers-to-be who reported smoking during pregnancy include: blacks (13 percent), Puerto Ricans (11 percent), and other and unknown Hispanics (9 percent) (1).
- Fewer than 5 percent of most other mothers-to-be of color reported smoking when pregnant, with Chinese mothers-to-be reporting the smallest share (1 percent) (1).
- Alcohol consumption during pregnancy was reported by nearly a fourth of white women (23 percent), nearly a sixth of black women (16 percent), and more than a twelfth of Hispanic women (9 percent) (39).
- The high prevalence of fetal alcohol syndrome (FAS) among American Indian/Alaska Native newborns (30 per 10,000 live births) is evidence of high rates of alcohol consumption during pregnancy (40). The leading cause of disability among American Indian/Alaska Native newborns, FAS can result in malformation, mental retardation, dysfunction of the nervous system, growth deficiencies, and joint abnormalities (41).
- Fetal alcohol syndrome (FAS) occurs much less frequently among infants born to women who are not American Indian/Alaska Native. Only 6 percent of infants born to black women have FAS, while fewer than 1 percent of the births to white, Hispanic, and Asian women have this condition (40).

FIGURE 24
Percent of Mothers-To-Be by Race/Ethnicity
Smoking During Pregnancy, 1993



* Includes Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and other Asian/Pacific Islander subpopulations

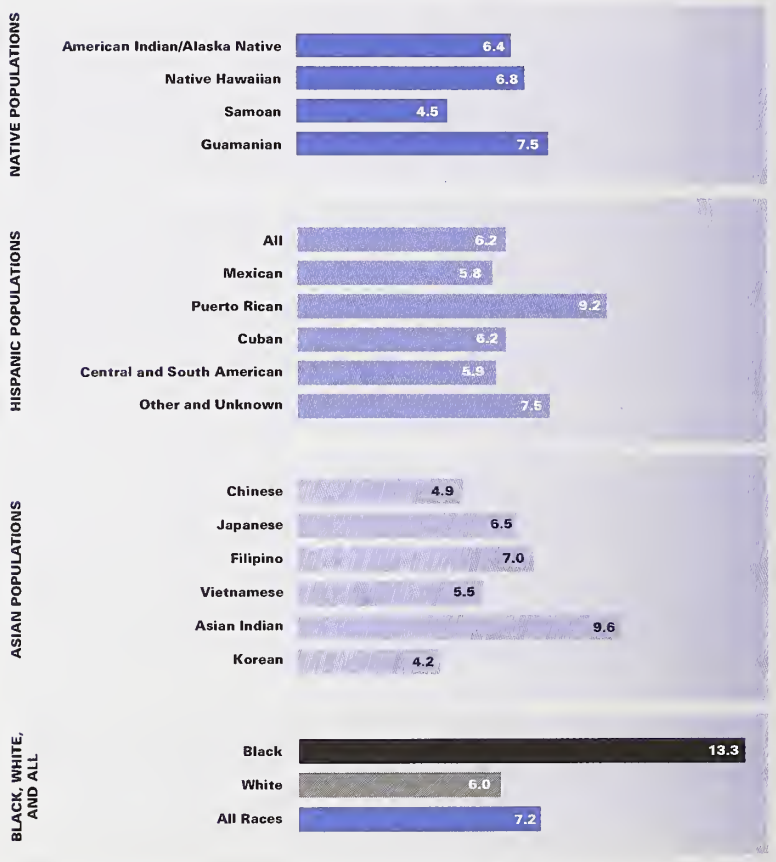
SOURCE: National Center for Health Statistics, *Health United States*, 1995, Hyattsville, MD: US Public Health Service, 1996.

- Small shares of white (4 percent), Hispanic (5 percent), and black (11 percent) women of all ages reported any drug use during pregnancy. However, drug use was more common among pregnant black and Hispanic women ages 25 to 29 years. Sixteen percent of Hispanic and 15 percent of black women in this age group reported using drugs during pregnancy. Only 3 percent of white women 25 to 29 years of age reported using drugs when pregnant (39).
- Although 5 percent or less of white, black, and Hispanic women reported using marijuana when pregnant, black women (5 percent) were more likely to report use than either white (3 percent) or Hispanic (2 percent) women (39).
- As with marijuana, cocaine use during pregnancy was reported more often by black women (5 percent) than by either Hispanic (0.7 percent) or white (0.4 percent) women. Crack cocaine use when pregnant also was reported more frequently by black women (4 percent) than by either white (0.3 percent) or Hispanic (0.1 percent) women (39).

Birth Outcomes: Weight

- Infants with low birth weight (less than 2,500 grams) and very low birth weight (less than 1,500 grams) are at greater risk of morbidity and mortality than bigger infants. The incidence of low- and very-low-birth-weight infants varies considerably by the race/ethnicity of the mothers of the infants, with black American women having the highest incidences of both low-birth-weight (13 percent) and very-low-birth-weight (3 percent) infants (1).
- Korean mothers (4 percent) report the smallest percentage of infants with low birth weight. Nearly 5 percent of infants born to both Samoan and Chinese mothers are low weight (1,36).
- The proportions of low-weight infants born to Puerto Rican (9 percent) and Asian Indian (10 percent) women are higher than the share born to white women (6 percent), but lower than the share born to black women (13 percent) (1,36).
- One percent or less of infants born to most women of color have very-low weight (less than 1,500 grams). Other than the 3 percent reported by black women, the only other group reporting a share greater than 1 percent was Puerto Rican women, nearly 2 percent of whose infants born live have very-low weight (1,36).

FIGURE 25
Low-Weight Infants as Percent of All Births to Mothers by Race/Ethnicity, 1992, 1993

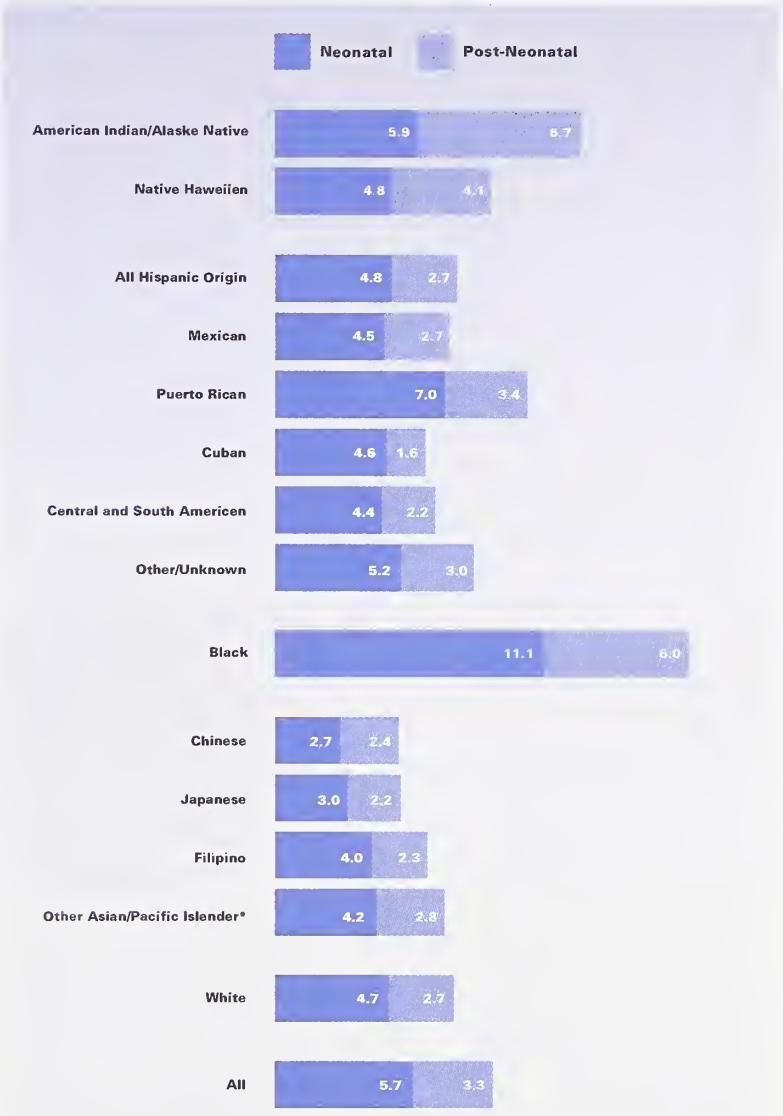


SOURCES: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996. Martin JA, Birth characteristics for Asian or Pacific Islander subgroups, 1992, *Monthly Vital Statistics Report* 1995;43(10),Supplement.

Birth Outcomes: Infant Mortality

- Infant mortality (that is, death under one year of age) reflects not only the standard of living of a population but also mirrors the health of the mother. Among women of color between 1989 and 1991, infant mortality rates were highest for the babies of black women—at 17 deaths per 1,000 live births, more than double the rate of 7 deaths per 1,000 live births to white mothers, and significantly greater than the rate for all mothers of 9 deaths per 1,000 live births (1).
- American Indians/Alaska Natives have the second highest infant mortality rate (13 deaths per 1,000 live births), followed by Puerto Ricans with 10 infant deaths per 1,000 live births. Nine infant deaths per 1,000 live births to Hawaiian/part Hawaiian women were reported in the 1989-1991 period. All the Asian American groups (for which data were reported) had infant mortality rates close to or lower than the infant mortality rate for whites (7 per 1,000 live births) (1).
- Although underreported, infant mortality rates generally are high for Pacific Islanders. For example, the total population of the Hawaiian Islands reported 9 deaths per 1,000 live births, while in Guam there were 14 deaths per 1,000 live births (42).
- Most infant deaths between 1989 and 1991 were neonatal (that is, occurring under 28 days) for all groups except American Indian/Alaska Native infants. Of the 13 deaths of American Indian/Alaska Native infants (per 1,000 live births), 6.7—or 53 percent—occurred in the post-neonatal period (that is, in days 28 through 365 after birth), often as the result of accidents or environmental hazards (1).
- The mortality rates of infants born to black mothers exceed mortality rates of infants born to other mothers, whether or not these women report drinking during pregnancy. In 1993, there were 16 infant deaths per 1,000 live births to black non-drinking mothers, while there were 7 infant deaths per 1,000 live births to both white and Hispanic abstinent mothers. Twenty-eight infants died (in 1991) per 1,000 born live to black women who reported drinking during pregnancy. This compares to 13 infant deaths (per 1,000 live births) to comparable Hispanic women and 9 infant deaths (per 1,000 live births) to comparable white women (18).

FIGURE 26
Neonatal and Postneonatal Deaths by Race/Ethnicity of Mothers, 1989-1991
Per 1,000 Live Births



* Includes Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and other Asian/Pacific Islander subpopulations

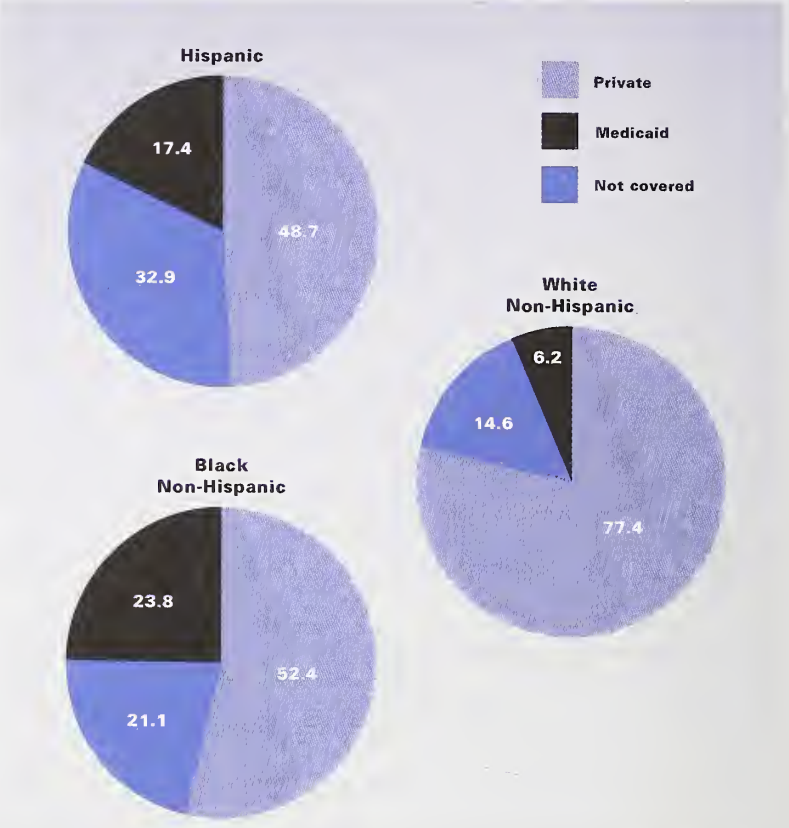
SOURCE: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996.

Access to Health Insurance and Services

Access to Health Insurance: People of Color

- People of color were disproportionately represented among the nearly 41 million people (15 percent of the total population) without health insurance in 1995. Fourteen percent of all whites and 33 percent of all poor whites reported a lack of health insurance coverage in 1995. Twenty-one percent of all blacks and 24 percent of all poor blacks reported a similar lack of health insurance. Hispanics, however, reported the greatest shares without health insurance. Among all Hispanics, 33 percent had no health insurance, while among poor Hispanics, this share was 41 percent (43).
- People of color also were more likely than whites to report lacking health insurance coverage for at least a month during the 1992 to 1994 period. While 23 percent of all white non-Hispanics reported spending at least a month without health insurance during this period, half (49 percent) of all Hispanics and 36 percent of all black Americans reported the same (44).
- Blacks and Hispanics under 65 years of age also were considerably less likely to have private health insurance (and the additional options and greater coverage it often affords) and, thus, more likely to have public insurance than were whites. In 1994, more than three-fourths of whites reported private health insurance coverage, compared to about half of both blacks (52 percent) and Hispanics (49 percent). Private insurance coverage rates by Hispanic subpopulations ranged from 46 percent among Mexican Americans and 49 percent among Puerto Ricans to nearly two-thirds (64 percent) among Cubans (1).
- Correspondingly, black non-Hispanics and Hispanics under 65 years of age were more likely to report Medicaid coverage than white non-Hispanics. Although only 6 percent of white non-Hispanics reported Medicaid coverage in 1994, nearly a fourth of blacks (24 percent) and a sixth (17 percent) of Hispanics reported this form of insurance (1).
- Hispanic subpopulations also varied in terms of the share reporting Medicaid coverage. Only 8 percent of Cubans and 16 percent of Mexican Americans reported this form of insurance, in comparison to a third (33 percent) of Puerto Ricans (1). This difference in coverage reflects in part the difference in the proportions of Mexican Americans and Cubans eligible for Medicaid, relative to Puerto Ricans, all of whom are U.S. citizens and, thus, eligible for the insurance, if poor enough.

FIGURE 27
Health Insurance Coverage for Persons Under 65 Years of Age by Race, 1994*



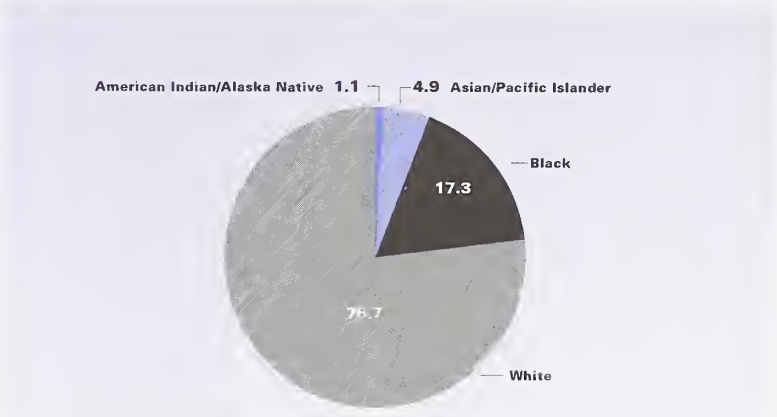
* Percents may not sum to 100 because coverage of persons under 65 years of age with other public insurance (Medicare or military plans) is not included.

SOURCE: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996.

Access to Health Insurance: Women of Color

- Although women of color represent 27 percent of all women, they were 23 percent (4.4 million) of the nearly 19 million uninsured women of all ages in 1995 (45).
- Each of the subpopulations of women of color, however, was more likely than white women (in 1995) to be uninsured. Thirteen percent of non-Hispanic white women were uninsured, compared to 17 percent of American Indian/Alaska Native, 18 percent of black, 19 percent of Asian and Pacific Islander, and 30 percent of Hispanic women (45).
- Because of differences both in the likelihood of being married and in the types of employment held by their spouses (i.e., whether health insurance coverage for dependents comes with a spouse's job), women of color were less likely to have insurance coverage indirectly through their spouses than were white women in 1990. While 32 percent of white non-Hispanic women 18 to 64 years of age reported this indirect coverage, around a fifth of both Asian (22 percent) and Hispanic (19 percent) women reported the same. Only 12 percent of black women 18 to 64 years of age reported indirect private health insurance coverage through a spouse (46).
- At least 30 percent of all groups of women (except Hispanics) reported direct, private, employer-based insurance coverage in 1990. Thirty-one percent of Asian and Pacific Islander women, 37 percent of black non-Hispanic women, and 38 percent of white non-Hispanic women reported direct health insurance coverage of this type. Just over a fourth (26 percent) of Hispanic women, however, reported direct health insurance coverage (46).

FIGURE 28
Women by Race/Ethnicity Who Lack Health Insurance Coverage, 1995



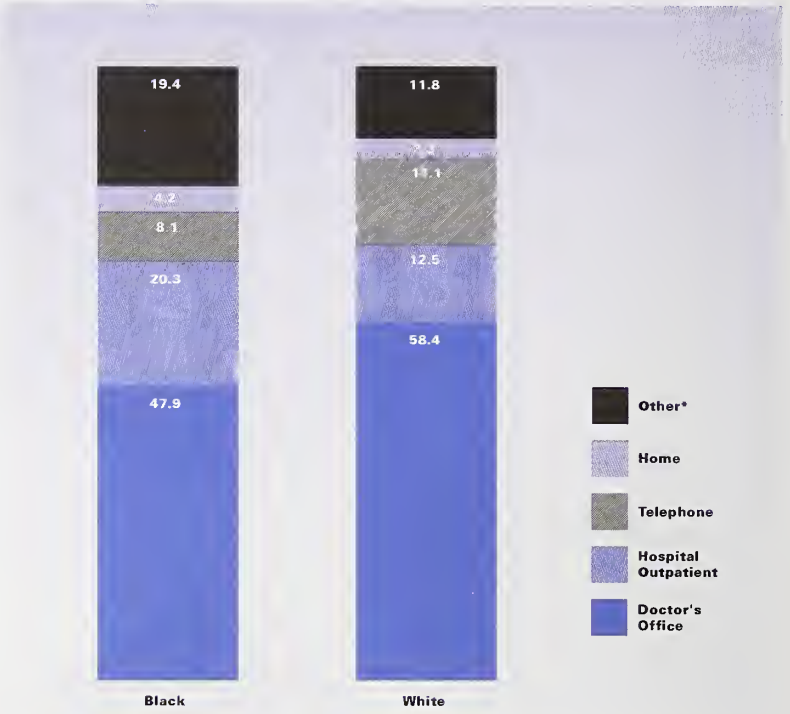
SOURCE: Bureau of the Census. *Unpublished health insurance estimates, 1995.* Washington, DC, 1996.

- Public health insurance coverage was more common among many women of color in 1995 than among white women. While only 27 percent of white non-Hispanic and 24 percent of Asian and Pacific Islander women reported public health insurance, 33 percent of Hispanic and 40 percent of black women reported the same (45).
- The mix of public insurance coverage—most commonly Medicaid for the poor and Medicare for the elderly and disabled—varied among subgroups of women in 1995. Medicaid coverage ranged from 30 percent for black women to 11 percent for white non-Hispanic women. Twenty-seven percent of Hispanic women, and 14 percent of Asian and Pacific Islander women also reported Medicaid coverage (45).
- Medicare coverage (among all age groups, reflecting both the elderly and disabled) was distributed differently than Medicaid coverage among women of color, with Asian and Pacific Islander and Hispanic women both reporting a small share (7 percent) with this form of health insurance in 1995. Somewhat larger shares of black non-Hispanic (11 percent) and white non-Hispanic (16 percent) women reported Medicare coverage (45).
- Medicare coverage among the elderly (women 65 years and older) varied only slightly by subgroup. Ninety-eight percent of white women 65 years of age and older reported having Medicare coverage in 1995. Equal percentages of black and Hispanic women (94 percent) reported having Medicare health insurance, as opposed to Asian women, of whom only 86 percent reported having this form of insurance (45).

Obtaining Health Care Services

- Access to health care includes both access to health insurance coverage and access to providers and facilities that render services. Adequate access to providers and facilities encompasses the existence of conveniently located services and the availability of child care (to enable mothers to seek medical attention), transportation, and health care providers capable of giving competent and sensitive care (47).
- Making contact with physicians or other providers is the first step beyond health insurance coverage. The finding that women either without health insurance or covered by Medicaid had more advanced breast cancer at the time of diagnosis than women with private health insurance illustrates the criticality of health insurance to seeking health care (48).
- More blacks than whites (20 percent versus 13 percent) reported that the hospital outpatient department (including hospital outpatient clinic, emergency room, and other hospital contacts) was their usual place of physician contact in 1994. Forty-eight percent of blacks and 58 percent of whites reported that the physician's office was their usual place of contact with a health provider (1). Among Hispanics, substantially higher percentages of Puerto Ricans (than Mexican Americans and Cuban Americans) reported hospital outpatient clinics and emergency rooms to be their usual source of care (35).
- Among Asian Americans, 22 percent of Korean households in Southern California reported that, at one time or another since coming to the United States, a family member has failed to get appropriate care. Although the most common barrier is financial, an additional 18 percent of Koreans reported not knowing where to go for care at some time since immigrating to the United States (49).
- Because of their eligibility for IHS services, nearly 55 percent of the American Indian/Alaska Native population living in IHS service areas reported having neither private health insurance nor public coverage (other than via the IHS) in 1987 (50).
- Lack of insurance coverage (other than via the IHS) sometimes becomes problematic for American Indians/Alaska Natives because government health care services for American Indians/Alaska Natives in urban and nonreservation rural areas often are very limited and uncoordinated. For example, American Indians/Alaska Natives living in urban areas can get treatment at IHS direct care facilities, but are not eligible for the more specialized services that may be provided elsewhere (i.e., "contract care" services). By contrast, American Indians/Alaska Natives on or near reservations—who are therefore eligible for the full range of IHS services—have access to both routine care and to the more specialized contract care services (50).
- American Indians/Alaska Natives who have private insurance (less than one-third of this population in 1987) have a choice that most other Americans do not have—to get free health care through a system in which the choice of providers and services is limited or to obtain private care elsewhere. The options for both private care and treatment at IHS facilities are limited by the distances that must be traveled to get to either. However, because the waiting times reported for treatment at IHS facilities exceed waiting times reported for services with other providers, American Indians/Alaska Natives with private insurance often prefer to seek private care (50).

FIGURE 29
Percent Distribution of Physician Contacts by Place of Contact and Race of Patient, 1994



* Other includes clinics or other places outside a hospital.

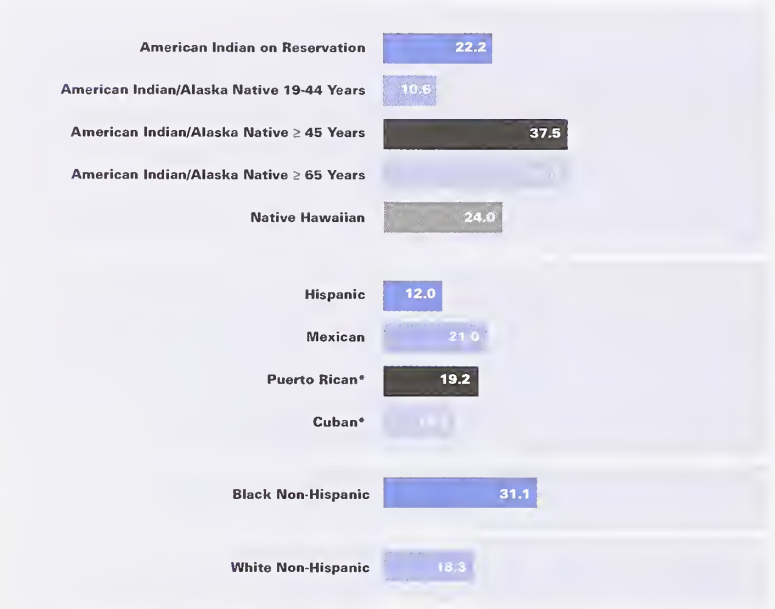
SOURCE: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996.

Morbidity and Mortality

Hypertension

- People are classified as hypertensive if their average systolic blood pressure is greater than 140 mm mercury, their average diastolic blood pressure is greater than 90 mm mercury, or they report taking medicine for high blood pressure. Hypertension, a major risk factor for both coronary heart disease and cerebrovascular disease, infringes upon the health of black women much more than it does upon the health of other women of color (1).
- Between 1988 and 1991, 31 percent of black non-Hispanic women were found to be hypertensive, more than 1.7 times the rate among non-Hispanic white women and more than 1.5 times the rate for Hispanic women (12 percent) (1,51).
- It has been suggested that Hispanics, specifically Mexican Americans, exhibit lower rates of hypertension than other U.S. populations due to a variety of factors, including genetics, lifestyle and culture. Furthermore, some research has demonstrated that more educated Mexican American women have lower rates of hypertension than less educated ones (52,53).
- Hypertension prevalence varies among Hispanic subpopulations. Based on data from 1982 to 1984 and from 1990, it is estimated that 21 percent of Mexican American women, 19 percent of Puerto Rican women, and 14 percent of Cuban women had hypertension. As women from these subpopulations age, at least 50 percent are predicted to develop hypertension (13,54).
- Among American Indian women living on or near reservations and eligible for services provided or supported by the IHS, 22 percent reported hypertension in 1987. While only 11 percent of American Indian/Alaska Native women between the ages of 19 and 44 had hypertension, the prevalence was increased threefold for women 45 years of age and older. In 1987, 38 percent of American Indian/Alaska Native women 65 years of age and older were hypertensive (55).
- In Hawaii, Native Hawaiians reported high rates of hypertension, and Native Hawaiian women had greater prevalence than any other ethnic group in the state. In 1985, 24 percent of Native Hawaiian women 20 to 59 years of age had hypertension. Sizable percentages of adult Samoan women in Hawaii and California have hypertension as well; using the systolic criterion, 13 percent are hypertensive, while 18 percent are hypertensive by the diastolic criterion (20,56,57,58).
- Select Asian and Pacific Islander American populations experience high rates of hypertension and are less likely to be aware that they have the disease or to be under medical supervision than are members of other racial/ethnic groups. Studies from 1978-1985 and from 1991 estimated the prevalence of hypertension in Asian American communities in California. Vietnamese and Filipino women (14 percent and 10 percent, respectively) had the highest rates of hypertension, followed by Japanese American (9 percent) and Chinese American (8 percent) women (20).
- Filipino women over 50 years of age who live in California have slightly higher prevalence of hypertension (65 percent) than black women in the same age cohort (63 percent) (59).
- Pregnancy induces hypertension in some women of color. In one study of nearly 600 Southwestern Navajo women, 11 percent experienced pregnancy-related hypertension (60).

FIGURE 30
Hypertension Among Women by Race/Ethnicity, 1987 to 1991
Percent



* From the 1982-1984 National Hispanic Health and Nutrition Examination Survey

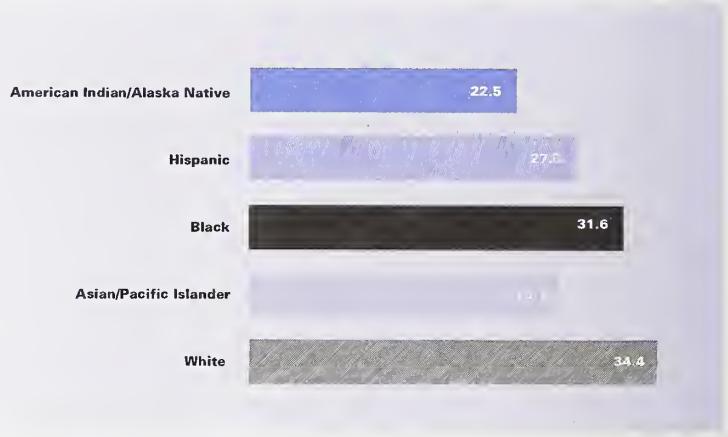
SOURCES: National Coalition of Hispanic Health and Human Services Organizations, *Hispanic women's health: A nuestros numeros fact sheet*, Washington, DC: COSSMHO, 1996. National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996. Horton JA (ed), *The women's health data book: A profile of women's health in the United States*, Second edition, Washington, DC: The Jacobs Institute of Women's Health, 1995. Tamir A, Cachola S, in: Zane NWS, Takeuchi DT, Young KNJ (eds), *Confronting critical health issues of Asian and Pacific Islander Americans*, Thousand Oaks, CA: Sage, 1994, pp. 209-247.

- Although well over 95 percent of hypertensive Mexican American, Cuban, and Puerto Rican women were aware of their condition, only 86 percent of Puerto Rican and Mexican American, and 79 percent of Cuban women reported receiving necessary treatment (1982-1984). Furthermore, only 44 percent of Mexican American, 42 percent of Puerto Rican, and 30 percent of Cuban women had their hypertension under control (54).

Cardiovascular Disease

- Diabetes, hypertension, high cholesterol, obesity, lack of exercise, and smoking are all risk factors for heart disease. Although various risk factors affect the different subpopulations of women of color, cardiovascular disease was the leading cause of death for black, Hispanic, American Indian/Alaska Native, and white women in 1993. Heart disease ranked as the second leading cause of death among Asian American women (1,10,17,61).
- The 385,548 deaths due to diseases of the heart among women in 1993 were distributed as follows: whites (86 percent), blacks (nearly 11 percent), Hispanics (nearly 3 percent), Asian and Pacific Islander Americans (less than 1 percent) and American Indians/Alaska Natives (less than 1 percent) (1).

FIGURE 31
Percent of Deaths Due to Heart Disease Among Women by Race/Ethnicity, 1993



SOURCE: National Center for Health Statistics, *Health United States, 1995*, Hyattsville, MD: US Public Health Service, 1996.

- Heart disease accounted for sizable shares of the deaths among women in 1993—white women (34 percent), black women (32 percent), Hispanic women (28 percent), Asian and Pacific Islander women (26 percent), and American Indian/Alaska Native women (23 percent). Proportionately fewer black and white women died from heart disease in 1993 than in 1980 (nearly 3 percent and more than 5 percent fewer, respectively). However a larger proportion of American Indian/Alaska Native (1 percent more) and Asian and Pacific Islander (0.5 percent more) women were killed by cardiovascular disease in 1993 than in 1980 (1).
- Black women have the highest age-adjusted death rate from heart disease (more than 164 per 100,000), 1.7 times that of non-Hispanic white women (nearly 99 per 100,000). The death rate was nearly 74 per 100,000 American Indian/Alaska Native females, followed by rates of more than 70 per 100,000 Hispanic women, and nearly 56 per 100,000 Asian and Pacific Islander women (1).

Cancers

- Cancers are the second leading cause of death for women of color, except for Asian and Pacific Islander women for whom they are the number one killer (1).
- Over the 1988-1992 period, the incidences of all cancers per 100,000 women ranged from highs of 348 among Alaska Native women and 346 among white women to the low of 180 among both American Indian and Korean American women. Other groups of women reporting high overall cancer incidences were black women at 326 cases per 100,000 and Native Hawaiian women at 321 cases per 100,000 (62).
- Also over the 1988-1992 period, death rates among women of color from all cancers varied. The highest death rate (as well as the highest incidence) was reported by Alaska Native women (179 per 100,000), with the lowest death rate reported among Filipino American women (63 per 100,000). As with incidence, high death rates from all cancers were reported by black and Native Hawaiian women (168 deaths per 100,000 women for both groups) (62).
- The rate of cancer mortality among American Indian women is lower than for the general population. However, American Indian/Alaska Native women in selected IHS service areas—Alaska; Aberdeen (including South Dakota, North Dakota, Nebraska, and Iowa); Bemidji (including Minnesota, Wisconsin, Michigan, and Indiana); and Billings (including Montana and Wyoming)—have higher cancer mortality rates than among the total U.S. female population (63).
- Five-year survival rates with all cancers were higher for white women than for black women over the 1986-1991 period. More than three-fifths (61 percent) of white women survive five years after diagnosis with cancer, while less than half of black women (47 percent) survive this length of time (62).

FIGURE 32
Incidence of and Mortality from All Forms of Cancer Among Women by Race/Ethnicity, 1988-1992
Per 100,000 Population

* Mortality rate not available

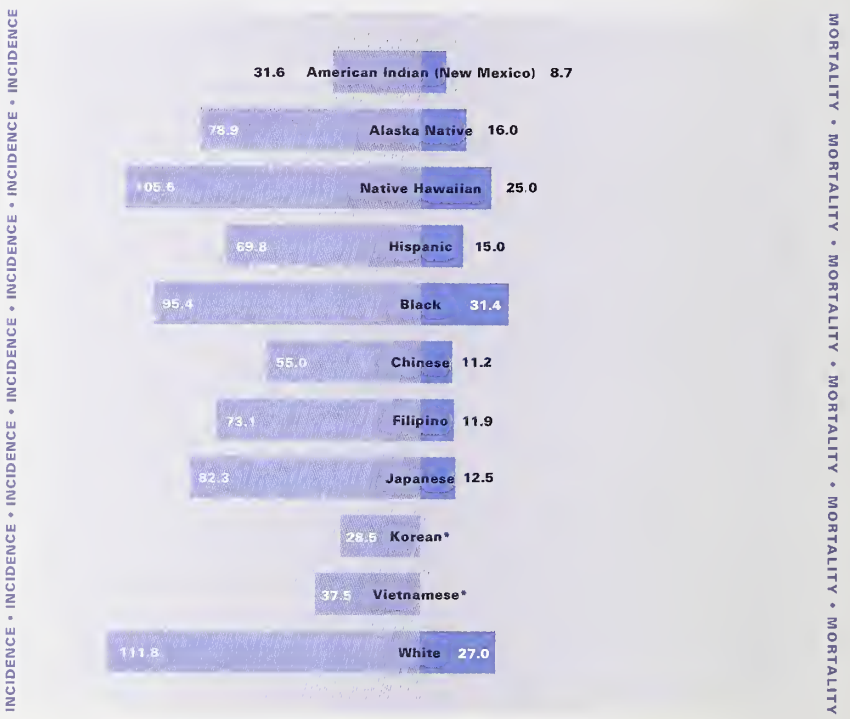
SOURCE: Miller BA, Kolonel LN, Bernstein L, Young JL Jr., Swanson GM, West D, Key CR, Liff JM, Glover CS, Alexander GA, et al. (eds), *Racial/Ethnic patterns of cancer in the United States 1988-1992*, NIH publication no. 96-4104, Bethesda, MD: National Cancer Institute, 1996.

The top two cancer killers of women are breast cancer and cancers of the lung and bronchus. Death rates from these forms of cancer vary among women of color, with the rates nearly equal within some groups and quite different for other groups (1988-1992). For example, the mortality rates for these cancers were equal for black American women (31 per 100,000 for both breast cancer and for cancers of the lung and bronchus) and for Japanese American women (13 per 100,000 for both breast cancer and for cancers of the lung and bronchus). However, death rates for these types of cancers differ for Native Hawaiian women (25 per 100,000 for breast cancer and 44 per 100,000 for cancers of the lung and bronchus) and for Alaska Native women (16 per 100,000 for breast cancer and 45 per 100,000 for cancers of the lung and bronchus) (62). Cancers at other sites of the body are found with varying frequencies among women of color. Colorectal cancer and kidney and renal cancers are more common and more deadly for Alaska Native women. Stomach cancer strikes Vietnamese women and kills Native Hawaiian women more often than other women of color. Cancer of the thyroid is more often found in Filipino American women, while Korean American women get cancers of the liver and bile duct more frequently than other women. Cancer of the pancreas has higher incidence and mortality rates among black American women than among other women of color (62).

Breast Cancer

- White women (112 per 100,000) and Native Hawaiian women (106 per 100,000) reported the greatest incidences of breast cancer, while Korean American women (29 per 100,000) reported the lowest incidence (1988-1992). American Indian women in New Mexico (32 per 100,000) and Vietnamese women (38 per 100,000) also reported low incidences (62).
- Black American women (95 per 100,000) have a lower incidence of breast cancer than white or Native Hawaiian women, although the incidence among black women under 40 years of age is higher than for whites (62,64).
- Eighty-two cases of breast cancer were reported for every 100,000 Japanese American women (between 1988 and 1992). Alaska Native women (79 per 100,000), Filipino American women (73 per 100,000), and Hispanic women (70 per 100,000) all were midway between the highest and the lowest incidences of breast cancer among women of color (62).
- Between 1982 and 1985, the age-adjusted incidence of breast cancer among Hispanic females in Los Angeles County, Denver, New York City, New Jersey, and Dade County (FL) ranged between 50 per 100,000 women (Denver) and 67 per 100,000 women (Dade County, FL) (65). Mexican American women reported a rate of breast cancer (52 per 100,000) lower than other Hispanic women in these places (13).
- The highest death rate from breast cancer was reported by black American women (31 per 100,000), whose incidence was lower than that of whites. Between 1989 and 1992, while there was a 5 percent decrease in mortality due to breast cancer among white women, among black women there was a 2 percent increase in the death rate (62,64).
- White women (27 per 100,000) and Native Hawaiian women (25 per 100,000) reported the next highest breast cancer death rates after black women. Breast cancer death rates among Alaska Native women (16 per 100,000) and Hispanic women (15 per 100,000) fell in the middle of the distribution (62).
- Although American Indian women in New Mexico report both the lowest incidence (32 per 100,000) and the lowest death rate (9 per 100,000) among the populations for whom data are collected in the National Cancer Registry, higher breast cancer death rates are reported among American Indians in other IHS service areas (62). Specifically, an age-adjusted death rate of 25 per 100,000 was reported for American Indian women in the Aberdeen service area (North Dakota, South Dakota, Nebraska, and Iowa) in 1991-1993; a rate of 21 per 100,000 was reported in the Billings service area (Montana and Wyoming) during that same period. Breast cancer mortality among American Indian women in the Albuquerque service area (including parts of Colorado, New Mexico, and Texas)—7 per 100,000—was lower than that reported in the National Cancer Registry for New Mexico alone (3).
- Asian American women have a mortality rate from breast cancer of 13 per 100,000 women, lower than the rates for other women (e.g., whites, blacks, Hispanics, and Native Americans) (66).
- Five-year survival rates with breast cancer reflect the mortality noted above. Eighty-four percent of white women survive five years after their diagnosis of breast cancer, although only 70 percent of Hispanic and 69 percent of black women survive the same length of time (62,64,67).

FIGURE 33
Incidence of and Mortality from Breast Cancer Among Women by Race/Ethnicity, 1988-1992
Per 100,000 Population



* Mortality rate not available

SOURCE: Miller BA, Kolonel LN, Bernstein L, Young JL Jr., Swanson GM, West D, Key CR, Liff JM, Glover CS, Alexander GA, et al. (eds), *Racial/Ethnic patterns of cancer in the United States 1988-1992*, NIH publication no. 96-4104, Bethesda, MD: National Cancer Institute, 1996.

Cervical Cancer

- Cervical cancer incidence varies among women of color from a low of 6 per 100,000 Japanese American women to a high of 43 per 100,000 Vietnamese American women (1988-1992) (62).
- Other women with low incidences of cervical cancer include: Chinese (7 per 100,000), white (9 per 100,000), Native Hawaiian (9 per 100,000), Filipino (10 per 100,000), and American Indian in New Mexico (10 per 100,000) (62).
- Black women (13 cases per 100,000), Korean women (15 cases per 100,000), Hispanic women (16 cases per 100,000), and Alaska Native women (16 cases per 100,000) were more likely to have cervical cancer than the other Asian American and Native American women noted above, but less likely to have it than Vietnamese American women (62).
- Cervical cancer incidence for Hispanic women in Los Angeles County, Denver, New York City, New Jersey, and Dade County (FL) ranged from a low of 10 per 100,000 (Dade County, FL) to a high of 39 per 100,000 (New Jersey). The incidence in Dade County reflects Cuban women primarily, while the New Jersey rate mainly reflects Puerto Rican women. Rates in the other three places were around 20 per 100,000 women (65).
- Although American Indian women in New Mexico had a low incidence of cervical cancer, their death rate was the highest reported among the groups of women in the National Cancer Registry—8 per 100,000 (1988-1992). When age-adjusted mortality for American Indian/Alaska Native women in the IHS service areas was examined for 1991-1993, however, the highest reported death rate was for the Aberdeen service area (North Dakota, South Dakota, Nebraska, and Iowa)—more than 14 deaths per 100,000 American Indian women. In Alaska and in the Navajo service area (four corners of the states Utah, Colorado, New Mexico, and Arizona), 6 deaths per 100,000 women were reported. The death rate reported among American Indian women living in the Albuquerque IHS service area (parts of New Mexico, Colorado, and Texas), of 0.8 per 100,000, was lower than the rate reported from the National Cancer Registry for American Indian women in New Mexico (8 per 100,000) (3,62).
- The death rate for American Indian/Alaska Native women from cervical cancer is high because they often are diagnosed later and have a poorer survival rate than other women (68).
- Black women report the second highest death rate from cervical cancer (7 per 100,000). Death rates for all other groups of women (besides black and American Indian/Alaska Native) are 3 per 100,000 women or less (62).
- The five-year survival rate for whites exceeds that for blacks for cervical cancer. During the 1986-1991 period, more than 71 percent of white women, but only 56 percent of black women, survived five years after a diagnosis of cervical cancer (62).

FIGURE 34
Incidence of and Mortality from Cervical Cancer Among Women by Race/Ethnicity, 1988-1992
Per 100,000 Population

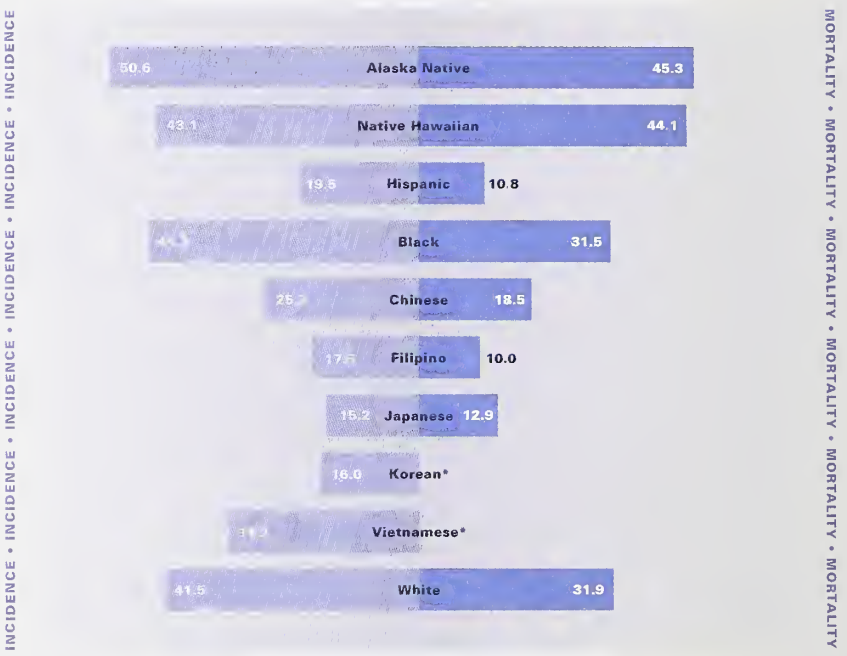
* Mortality rate not available

SOURCE: Miller BA, Kolonel LN, Bernstein L, Young JL Jr., Swanson GM, West D, Key CR, Liff JM, Glover CS, Alexander GA, et al. (eds), *Racial/Ethnic patterns of cancer in the United States 1988-1992*, NIH publication no. 96-4104, Bethesda, MD: National Cancer Institute, 1996.

Cancers of the Lung and Bronchus

- During the 1988-1992 period, the incidence of cancers of the lung and bronchus ranged from a low of 15 per 100,000 Japanese American women to a high of 51 per 100,000 Alaska Native women (62).
- Incidence also was high among women who are white (42 per 100,000), Native Hawaiian (43 per 100,000), and black (44 per 100,000) (62).
- Relatively low rates of cancers of the lung and bronchus were reported for Korean (16 per 100,000), Filipino (18 per 100,000), and Hispanic (20 per 100,000) women (62).
- Age-adjusted incidences of lung cancer among Hispanic women in Los Angeles County, Denver, New York City, New Jersey, and Dade County (FL) between 1982 and 1985, were arrayed between 14 per 100,000 in New York City and 19 per 100,000 in Los Angeles County (65).
- The highest death rates from cancers of the lung and bronchus between 1988 and 1992 were reported by Alaska Native (45 per 100,000) and Native Hawaiian (44 per 100,000) women (62).
- In recent years, mortality from lung cancer has increased markedly for American Indian/Alaska Native women living in the following IHS service areas—Alaska, Aberdeen (North Dakota, South Dakota, Nebraska, and Iowa), Billings (Montana and Wyoming), and Bemidji (Minnesota, Wisconsin, Michigan and Indiana). Death rates from lung cancer have risen from lower than the national average to 1.5 to 2.5 times the U.S. rate in these places. Rates for American Indian women in Arizona and New Mexico have remained relatively flat, at less than one-third the national rate (69).
- Mortality rates from lung and bronchial cancers among black and white women are equal at 32 per 100,000 (62).
- The lowest death rates due to lung and bronchial cancers among women are 10 per 100,000 Filipino women and 11 per 100,000 Hispanic women (62).

FIGURE 35
Incidence of and Mortality from Cancers of the Lung and Bronchus Among Women by Race/Ethnicity, 1988-1992
Per 100,000 Population



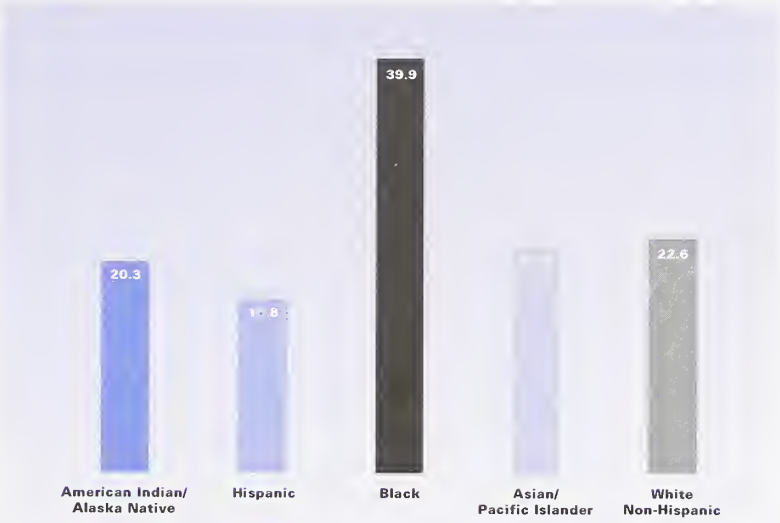
* Mortality rate not available

SOURCE: Miller BA, Kolonel LN, Bernstein L, Young JL Jr., Swanson GM, West D, Key CR, Liff JM, Glover CS, Alexander GA, et al. (eds), *Racial/Ethnic patterns of cancer in the United States 1988-1992*, NIH publication no. 96-4104, Bethesda, MD: National Cancer Institute, 1996.

Cerebrovascular Diseases

- Cerebrovascular diseases were the third leading cause of death for most women except American Indians/Alaska Natives (for whom it was the fifth leading cause of death). In 1993, at least 93,282 women died of these diseases (1).
- The mortality rate for cerebrovascular diseases, primarily strokes, among black women is nearly twice that of all other women regardless of age (nearly 40 per 100,000 women, age-adjusted). In 1993, age-adjusted death rates among other women of color from cerebrovascular diseases were: nearly 23 per 100,000 non-Hispanic white women, nearly 22 per 100,000 Asian and Pacific Islander women, more than 20 per 100,000 American Indian/Alaska Native women, and just under 17 per 100,000 Hispanic women (1).
- Between 1980 and 1993, the proportion of all deaths among women that were due to cerebrovascular diseases decreased for Asian and Pacific Islanders (from nearly 12 percent to nearly 10 percent), for blacks (from nearly 11 percent to nearly 8 percent), and for whites (from 11 percent to more than 8 percent). This proportion remained nearly constant for American Indian/Alaska Native women (around 6 percent) (1).

FIGURE 36
Mortality Rates Among Women by Race/Ethnicity for Cerebrovascular Disease, 1993
Per 100,000 Population

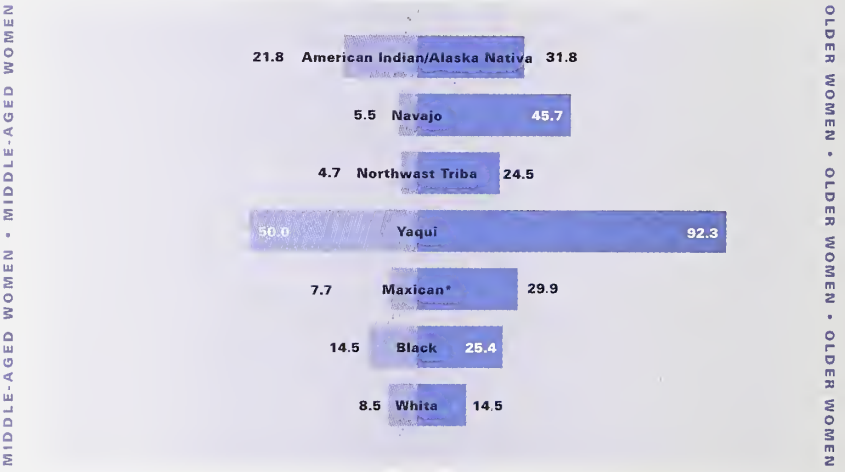


SOURCE: National Center for Health Statistics, *Health United States, 1995,* Hyattsville, MD: US Public Health Service, 1996.

Diabetes Mellitus

- Diabetes mellitus, a chronic condition characterized by abnormal glucose metabolism, is a major health problem and cause of increased mortality among women of color. Diabetes primarily affects the circulatory system and frequently is associated with conditions such as arteriosclerosis (hardening of the arteries) and kidney failure (70).
- Older women are more likely to have diabetes than middle-aged women. The difference between the shares of middle-aged and elderly Yaqui and Navajo women with diabetes is around 40 percentage points. This is nearly four times larger than the differences between shares of middle-aged and elderly American Indian/Alaska Native women of other tribes and black women with diabetes. There is only a six-percentage-point difference between the shares of middle-aged and elderly white women with this disease (10,11,55).
- Older American Indian/Alaska Native and Mexican American women are among the most likely to have diabetes (32 percent and 30 percent, respectively), followed by black (25 percent) and white (15 percent) women (10,11, 55).
- The highest prevalence of diabetes was found among Yaqui Indian women. Fifty percent of Yaqui women between 35 and 54 years of age and 92 percent of Yaqui women between 55 and 64 years of age were diabetic (1990). The prevalence of diabetes among female Pima Indians ranged from a low of 15 percent (among women 24 to 34 years of age) to a high of 68 percent (among women 55 to 64 years of age) (1965-1975). On the other hand, Alaska Native women tend to have much lower prevalence of diabetes. Among Alaska Natives, Aleutian women 65 years of age and over, in 1985, had the largest proportion of diabetic women (only 12 percent) (10).

FIGURE 37
Prevalence of Diabetes Among Middle-Aged and Older Women by Race/Ethnicity, 1985 to 1989
Percent



* Data from 1979 to 1988

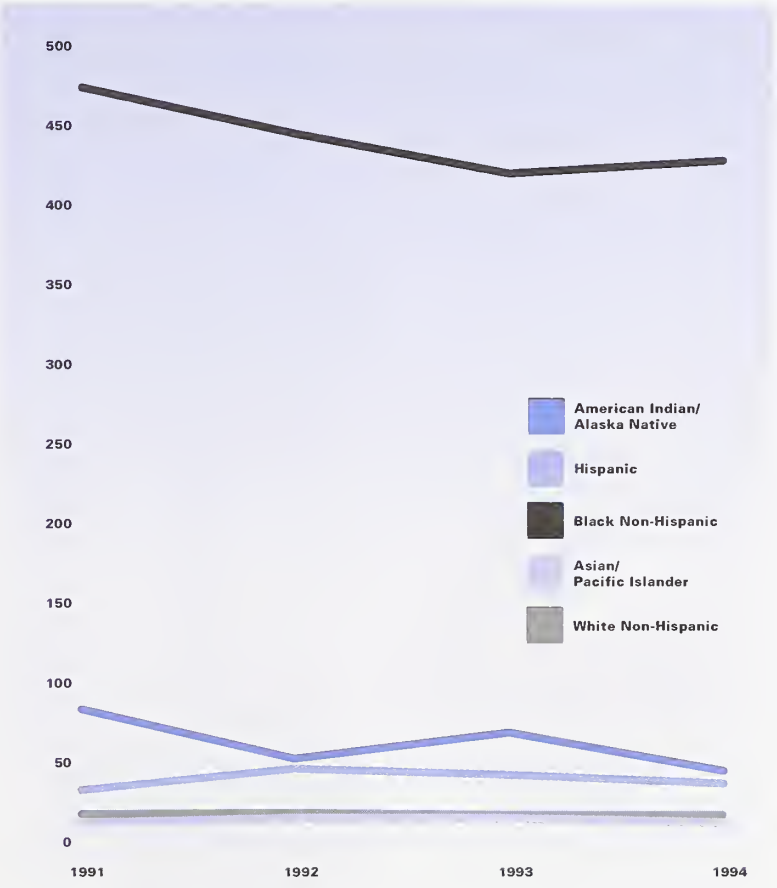
SOURCES: Ellis JL, Campos-Outcalt D, Cardiovascular disease risk factors in Native Americans: A literature review, *Am J Prev Med* 1994; 10(5):295-307. Crews DE, in: Zane NWS, Takeuchi DT, Young KNJ (eds), *Confronting critical health issues of Asian and Pacific Islander Americans*, Thousand Oaks, CA: Sage, 1994, pp. 174-207. Johnson A, Taylor A, *Prevalence of chronic diseases: A summary of data from the Survey of American Indians and Alaska Natives*, National Medical Expenditure Survey Data Summary 3, Agency for Health Care Policy and Research, Rockville, MD: US Public Health Service, 1991.

- Well over one-third of Native Hawaiians (both sexes) are diabetic. Other Pacific Islander women also report a high prevalence of diabetes (11).
- Sixteen percent of Puerto Rican women and 15 percent of Mexican American women (45 to 74 years of age) reported having diabetes (1982-1984). For Mexican American women, however, with greater acculturation comes reduced obesity and a lower prevalence of diabetes (13,15).
- The health outcomes of blacks (both women and men) with diabetes are far worse than those of whites. Blacks are more likely to be blinded, become amputees, develop end-stage renal impairment, and die from diabetes (70).
- From 1990 to 1992 and in 1993, the mortality rates from diabetes among American Indian/Alaska Native and non-Hispanic black women were close to three times those for non-Hispanic white women—28 per 100,000 American Indian/Alaska Native women and 27 per 100,000 black women, versus 10 per 100,000 white women (1,71).
- The manifestations of diabetes mellitus vary only slightly among women of color. Although gestational diabetes (diabetes occurring in a pregnant woman) is present in only 1 to 3 percent of all pregnancies in the white and black populations, perinatal mortality (infant mortality at birth) for pregnant black women with diabetes is three times that for pregnant white women with diabetes. In one study of Navajos, gestational diabetes was identified in 6 percent of all pregnancies. Among American Indian/Alaska Native mothers with gestational diabetes, nearly 60 percent will develop freestanding diabetes within 16 years of delivery (68,72).

Sexually Transmitted Diseases Among Women of Color

- One in 100 non-Hispanic black women contracted gonorrhea in 1994, compared to slightly more than 1 in 1,000 American Indian/Alaska Native women and slightly fewer than 1 in 1,000 Hispanic women. The reported gonorrhea rates for non-Hispanic white and Asian American women were considerably lower (nearly 84 per 100,000 and 26 per 100,000, respectively) (73).
- The reported rate of gonorrhea peaked among 15 to 19 year olds and steadily decreased for women of color 20 to 65 years of age. The incidence among non-Hispanic black women remained, on average, 38 times that of Asian American, 26 times that of non-Hispanic white, 12 times that of Hispanic, and 8 times that of American Indian/Alaska Native women (73).
- Rates of gonorrhea among black women ages 35-39 years also were considerably greater than among other groups of women. The rate of nearly 426 cases per 100,000 black non-Hispanic women in 1994 was more than 20 times the rate among white non-Hispanic women (18 per 100,000) and 10 times the rate among Hispanic women (40 per 100,000). The incidence of gonorrhea among American Indian/Alaska Native women of 49 per 100,000 is a distant second to the 1994 rate among black non-Hispanic women (73).
- Among women over 65 years of age, fewer than 1 per 100,000 non-Hispanic white and American Indian/Alaska Native women acquired gonorrhea in 1994. In comparison, nearly 5 per 100,000 Asian American women, more than 11 per 100,000 Hispanic women, and almost 22 per 100,000 non-Hispanic black women in this age group contracted gonorrhea (73).
- From 1991 to 1994, the rate of syphilis among all women of color decreased. One-third as many Hispanic women and approximately half as many non-Hispanic black, American Indian/Alaska Native, Asian American, and non-Hispanic white women contracted syphilis in 1994 as had in 1991 (73).
- The overall rate of syphilis among women of color in 1994 was highest among non-Hispanic black women (more than 55 per 100,000) and lowest among Asian American and non-Hispanic white women (both less than one per 100,000). Three per 100,000 Hispanic women and more than 2 per 100,000 American Indian/Alaska Native women also contracted syphilis that year (73).
- Black women are six times more likely than white women to be infected with the herpes simplex virus type 2 (74).
- Pelvic inflammatory disease (PID), a sexually transmitted infection, attacks women's upper reproductive tract and can lead to both ectopic pregnancies and tubal scarring. Women of color reported one-third of all PID cases, and the incidence of ectopic pregnancies in black women was 1.5 times that of all other women of color (74).

FIGURE 38
Gonorrhea Among Women 35-39 Years of Age by Race/Ethnicity, 1991-1994
Per 100,000 Population

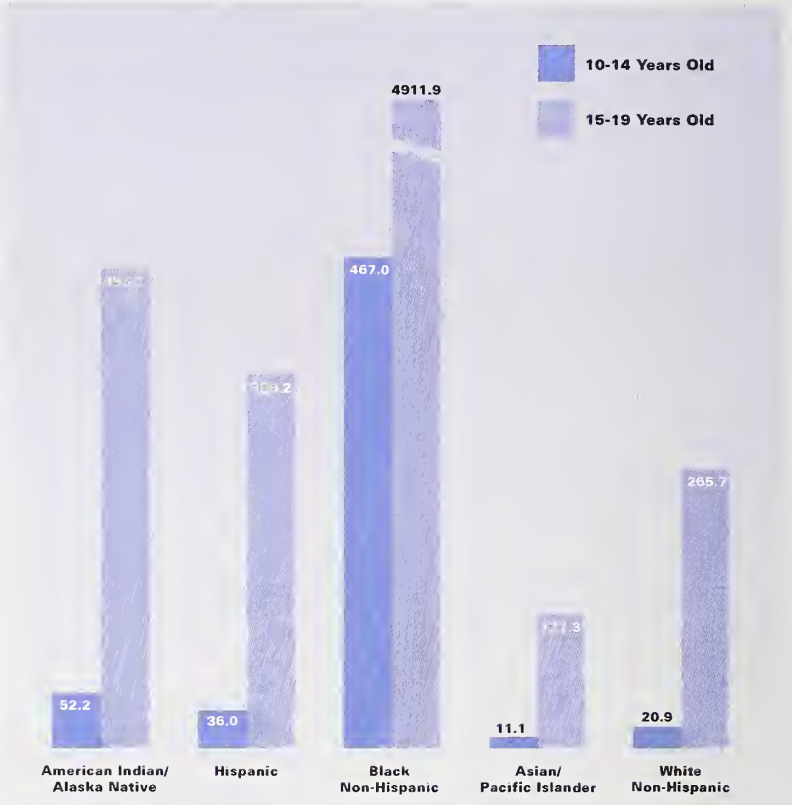


SOURCE: Centers for Disease Control and Prevention (CDC), Division of STD Prevention, *Sexually transmitted disease surveillance, 1994*, Atlanta, GA: CDC, September 1995.

Sexually Transmitted Diseases Among Adolescent Females of Color

- In 1994, the rate of gonorrhea per 100,000 non-Hispanic black girls (10 to 14 years of age) was 467, nearly nine times the rate of gonorrhea among American Indian/Alaska Native girls (more than 52 per 100,000). Asian and Pacific Islander girls had the lowest rate of gonorrhea (11 per 100,000) followed by non-Hispanic white girls (21 per 100,000) and Hispanic girls (36 per 100,000) (73).
- The incidence of gonorrhea among older adolescent females (15 to 19 years of age) was 10 times that among females 10 to 14 years of age. The reported rate of gonorrhea among females 15 to 19 years of age ranged from a low of more than 127 per 100,000 (among Asian and Pacific Islanders) to a high of nearly 4,912 per 100,000 (among non-Hispanic blacks) (73).
- Non-Hispanic white, Hispanic, and American Indian/Alaska Native female youth 15 to 19 years old had gonorrhea incidences closer to the rate for Asian and Pacific Islanders than to the rate for black Americans. The incidence of gonorrhea among non-Hispanic white female youth was nearly 266 per 100,000, compared to 356 per 100,000 among Hispanics, and nearly 456 per 100,000 among American Indians/Alaska Natives (73).
- Hispanic, Asian and Pacific Islander, American Indian/Alaska Native, and Non-Hispanic white girls 10 to 14 years of age reported a very low incidence of syphilis in 1994 (fewer than 1 per 100,000). The syphilis rates for adolescent females 15 to 19 years of age of these same racial/ethnic groups also were small—less than 3 per 100,000.

FIGURE 39
Gonorrhea Among Adolescent Females by Race/Ethnicity, 1994
Per 100,000 Population



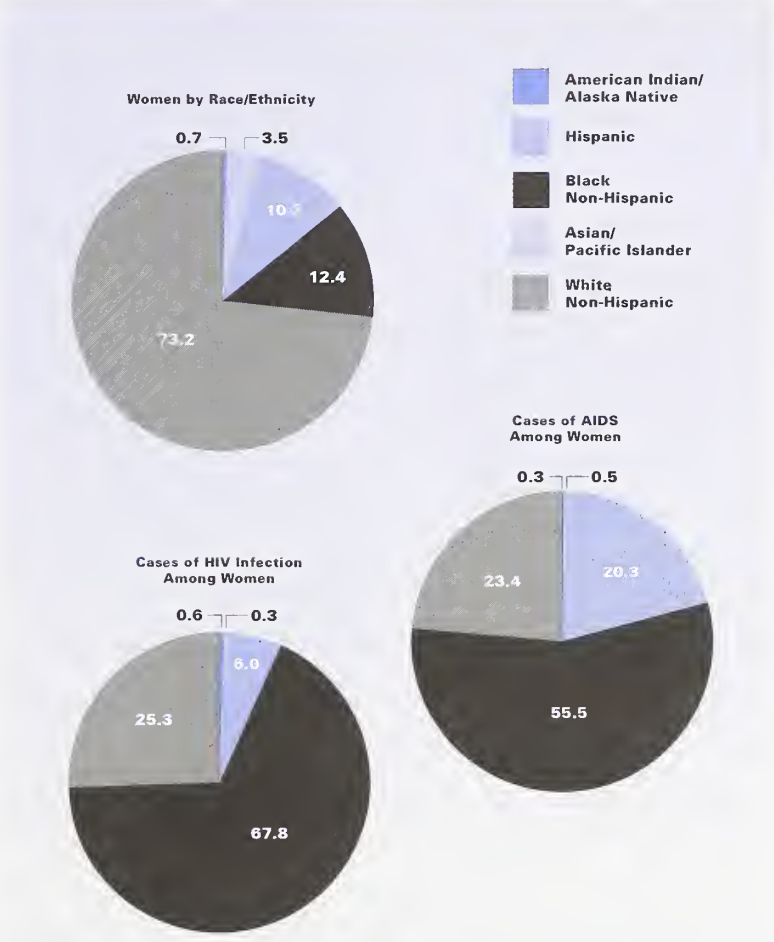
SOURCE: Centers for Disease Control and Prevention (CDC), Division of STD Prevention, *Sexually transmitted disease surveillance, 1994*, Atlanta, GA: CDC, September 1995.

On the other hand, the rate for non-Hispanic black girls 10 to 14 years of age was more than 7 per 100,000. In addition, non-Hispanic black females 15 to 19 years of age contracted syphilis at a significantly higher rate (nearly 108 per 100,000) (73).

HIV Infection and AIDS

- The human immunodeficiency virus (HIV) that causes acquired immune deficiency syndrome (AIDS) has infected a growing number of women since 1981, when the condition first was identified and tracked as an infectious disease. Between 1985 and 1995, the proportion of reported AIDS cases occurring among women increased from 7 percent to 19 percent, with the disease disproportionately affecting women of color (75).
- Between 1981 and 1996, the Centers for Disease Control and Prevention (CDC) had received reports of 20,302 cases of HIV infection and 85,500 cases of AIDS among women and adolescents ages 13 years and older.
- Most of these cases were among black and Hispanic women. Although black women are only 12 percent of all women, they account for 68 percent of all cases of HIV infection and 56 percent of all cases of AIDS reported among women between 1981 and 1996. Similarly, although only 10 percent of all women, Hispanics accounted for 6 percent of all cases of HIV infection and 20 percent of all cases of AIDS reported among women (76).
- Among women, the two main methods of transmission for HIV infection are injecting drug use and heterosexual contact. Since 1981, larger shares of white women (43 percent), black women (47 percent), and American Indian/Alaska Native women (47 percent) have reported injecting drug use as the major exposure category for cases of AIDS. Nearly equal proportions of Hispanic women have reported injecting drug use (44 percent) and heterosexual contact (46 percent) as the cause of AIDS. The largest share of Asian and Pacific Islander women (46 percent) reported heterosexual contact as the source of infection, while only 17 percent reported injecting drug use (76).
- During 1996, however, somewhat different patterns for transmission among women were reported. White, black, and American Indian/Alaska Native women all reported nearly equal shares of cases due to injecting drug use and heterosexual contact. Nearly half (48 percent) of Hispanic women reported heterosexual contact as the cause of AIDS, with another third reporting injecting drug use as the cause. More than two-fifths (44 percent) of Asian and Pacific Islander women also reported heterosexual contact as the cause of AIDS, with 16 percent (the highest among any of the groups of women for whom data are reported) identifying blood transfusion as their transmission category and 9 percent crediting injecting drug use (76).
- Among Hispanic women, most cases of HIV infection and AIDS are reported by Puerto Rican women, who, as U.S. citizens, are the group most acculturated to U.S. society. Acculturation

FIGURE 40
Distribution of Women by Race/Ethnicity, 1996, vs. Cases of AIDS and HIV Infection Among Women by Race/Ethnicity, 1981 Through 1996
Percent



SOURCES: Bureau of the Census, *US population estimates by age, sex, race, and Hispanic Origin, 1990-1995, with associated tables for recent months*, Population Division Release PPL-41, 1996. Centers for Disease Control and Prevention, *HIV/AIDS Surveillance Report* 1996; 8(2).

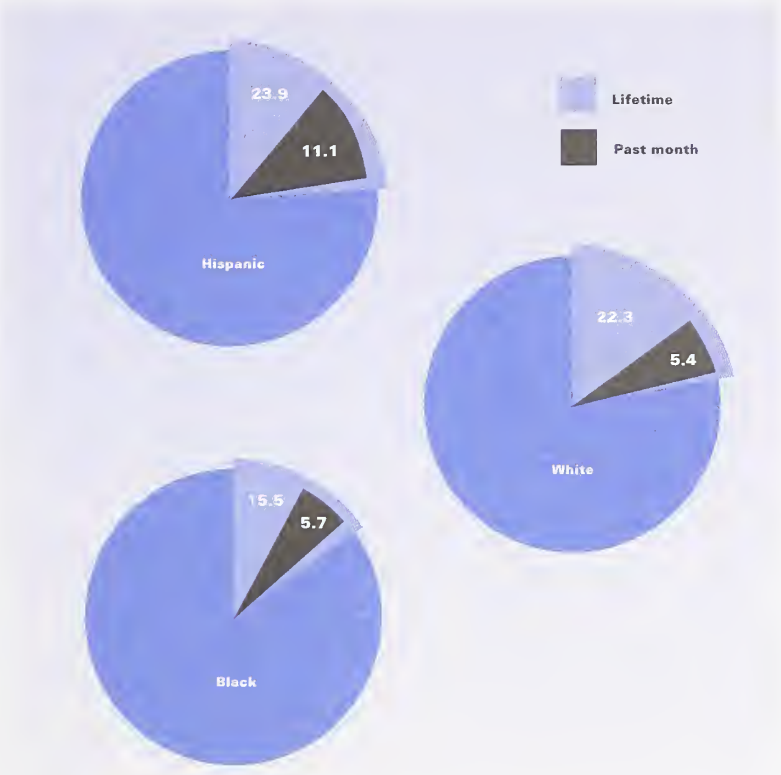
among Hispanics seems to play a role in the transmission of HIV/AIDS, with intravenous drug use most prevalent among more acculturated Latinas. Less acculturated Latinas report low perceived risk of AIDS because they are less likely to report using illegal drugs or engaging in sexual activity with multiple partners (77).

- Because it is difficult to conduct controlled experiments on intravenous drug users, this group of HIV/AIDS patients is less likely to be included in experimental protocols. This means that black and American Indian/Alaska Native women may be less likely to receive antiviral medications than other groups of HIV/AIDS patients, whose ranks are less dominated by intravenous drug users (78).
- Black and Hispanic women may be more vulnerable than white women to heterosexual transmission of HIV/AIDS through sex with bisexual men. Compared to white gay men, larger proportions of black and Hispanic gay men report having sex with both men and women—30 percent for black, 20 percent for Hispanic, and 13 percent for white gay men (78).
- Although only 244 cases of AIDS were reported among American Indian/Alaska Native women between 1981 and 1996, this figure (and all reported data on HIV/AIDS) may be an underestimate. It is difficult to count and track health conditions among American Indians/Alaska Natives, some of whom are very mobile between their reservations and urban or suburban areas (76,79). Reported mortality rates due to HIV infection vary among IHS service areas, with the Alaska and Portland areas reporting the highest death rates during the 1991-1993 period (3).
- HIV infection now is the third leading cause of death among all women ages 25 to 44 years and the leading cause of death among black women in this age group. Between 1991 and 1993, the death rate from HIV infection among black women was 34 per 100,000, followed by the rate of 12 deaths per 100,000 Hispanic females. Death rates per 100,000 were nearly 4 for white, 2 for American Indian/Alaska Native, and 0.9 for Asian and Pacific Islander women (1).
- Although death rates from HIV infection are lower for women 45 to 64 years of age than among younger women, black women reported the highest rate (14 per 100,000) among this age cohort as well (1991-1993). Mortality among Hispanic women was 7 per 100,000 women, while 2 white women per 100,000 in this age group died of the disease. (NOTE: The numbers of deaths among Asian and Pacific Islander and American Indian/Alaska Native women in the age group 45 to 64 years were so small that rates were not calculated.) (1).
- The years of potential life lost to HIV infection before the age 65 per 100,000 black women totaled 556. This compares to the 62 years of potential life lost to HIV infection before age 65 per 100,000 white women (1).
- When women have HIV infection or AIDS, others in their households—lovers, spouses, and/or children—also are likely to have the disease. Women with AIDS who must fulfill traditional roles as caregivers are likely to live for shorter periods of time after diagnosis with the condition than women who do not have the added stress of providing care to others. In addition, women with AIDS often leave behind orphans with HIV infection or AIDS, many of whom subsequently are raised by their grandmothers, a fact that increases the stresses in the lives of these older women (78).

Mental Health Among Women of Color

- Hispanic and white women have a higher lifetime prevalence of depression (24 percent and 22 percent, respectively) than black women (16 percent). Furthermore, when surveyed in 1991, nearly twice as large a share of Hispanic women (11 percent) reported being depressed as did black and white women (nearly 6 percent and 5 percent, respectively) (80).
- A 1993 survey found Hispanic women (53 percent) more likely to suffer from severe depression than either non-Hispanic black (47 percent) or white (37 percent) women (13).

FIGURE 41
Prevalence of Major Depression Among Women by Race/Ethnicity, 1991
Percent



SOURCE: Rouse BA (ed), *Substance abuse and mental health statistics sourcebook*, DHHS Publication No. (SMA) 95-3064, Washington, DC: US Government Printing Office, 1995.

Mental Health Among Adolescent Females of Color

- In one 1986 study, 14 percent of American Indian/Alaska Native female youth were characterized as extremely sad and hopeless; 6 percent displayed signs of serious emotional stress (22). More than one-fifth of American Indian/Alaska Native female youth (22 percent) had ever attempted suicide.
- Twice as many Hispanic female youth (21 percent) attempted suicide during the year preceding the survey, compared to 11 percent of black and 10 percent of white girls. Similarly, 7 percent of Hispanic high school girls have attempted suicide and needed medical attention, compared to 4 percent of black and 3 percent of white female adolescents (14,22).
- Approximately one-third of Hispanic and white high school females considered attempting suicide (34 percent and 32 percent, respectively), considerably more than the 22 percent of black female youths who also thought about ending their lives during the 12 months prior to the survey (14).
- Between 1991 and 1993, the mortality rate for suicide among females 15 to 24 years of age was highest for American Indians/Alaska Natives (more than 8 per 100,000), followed by 4 per 100,000 for both young Asian and Pacific Islander and young non-Hispanic white women. The death rate from suicide among Hispanic females (15 to 24 years of age) was nearly 3 per 100,000 (1).

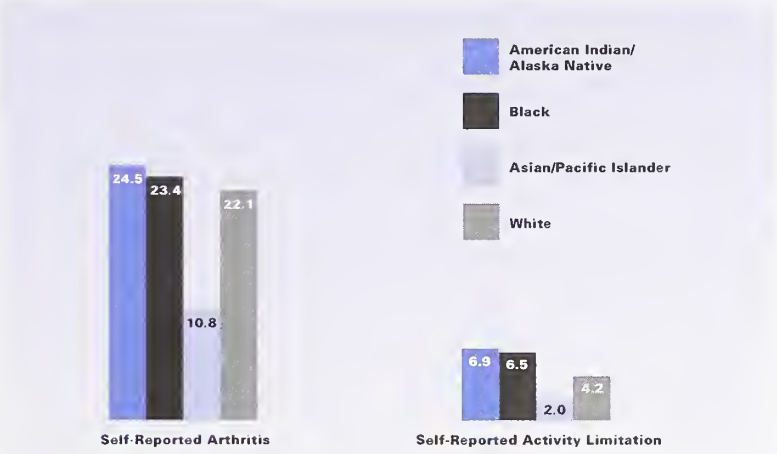
FIGURE 42
Percent of Adolescent Females by Race/Ethnicity Who Seriously Considered or Attempted Suicide in the Preceding Year, 1995

SOURCE: Kann L, Warren CW, Harris WA, Collins JL, Williams BI, Ross JG, Kolbe LJ, State and Local YRBSS Coordinators, Youth risk behavior surveillance—United States, 1995, *MMWR CDC Surveill Summ* September 27, 1996; 45(No.55-4).

Osteoporosis and Arthritis

- Osteoporosis is a condition associated with an excessive loss of bone mass and an increased risk of bone fractures. As girls grow into women, their bone mass increases. However, as women continue to age they lose more bone mass than they gain. Women over 50 years of age with osteoporosis have a bone mineral density more than 2.5 standard deviations below the norm (mean). Osteopenia, low bone mass, is a less severe form of osteoporosis—mineral bone density between 1 and 2.5 standard deviations below the norm (81,82).
- Asian American and white women are believed to be at increased risk for osteoporosis and osteopenia due to low consumption of calcium and large percentages of slender women. Low levels of estrogen, smoking, drinking, and a family history of osteoporosis also are risk factors (82).
- More than one-fifth of white and Asian American women (both 21 percent) are believed to have osteoporosis, and an additional 39 percent to have osteopenia. In comparison, one-tenth of black women have osteoporosis, and 29 percent have osteopenia. American Indian/Alaska Native and Mexican American women are in the middle; of both groups, 16 percent are estimated to have osteoporosis and 36 percent to have osteopenia (81,82).

FIGURE 43
Self-Reported Activity Limitation Due to Arthritis Among Women 15 Years of Age and Older by Race/Ethnicity, 1989-1991
Age-Adjusted Annual Percents



SOURCE: Centers for Disease Control and Prevention, Prevalence and impact of arthritis among women—United States, 1989-1991, *MMWR Morb Mortal Wkly Rep* 1995; 44:329-334.

- Arthritis and other rheumatoid conditions—chronic inflammation and/or stiffness of the joints, muscles, and tendons—are more common among women than men. Arthritis and other rheumatoid conditions were the leading causes of activity limitation and disability among women in 1995 (83).
- Between 1989 and 1991, one quarter of American Indian/Alaska Native women reported having arthritis, more than twice the prevalence among Asian and Pacific Islander American women (11 percent). Twenty-three percent of black women and 22 percent of white women self-reported living with arthritis, as well (83).
- Severe arthritic pain can lead to activity limitation. Between 1989 and 1991, 7 percent of black and American Indian/Alaska Native women experienced activity limitation, nearly twice the share among white women (4 percent), and nearly four times the share among Asian American women (2 percent) (83).

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ISSUES RELATED TO IMPROVING THE HEALTH OF WOMEN OF COLOR

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Data Collection Problems

Many subpopulations of women of color are known only by the absence of data on them. Because Native Americans, Hispanics, and Asian Americans are not broadly distributed across the United States, large national surveys do not sample these groups sufficiently to collect reliable data. For example, even though Hispanic ethnicity was added to the Standard Birth and Death Certificate recommended for use in each state in 1989 and the majority of states have reported this information since 1991, reliable national mortality data for Hispanics currently are not available. Incomplete reporting in some states and differences in the wording of the item among states hinder the development of these data (1,2).

In addition, aggregating data for these racial/ethnic groups often obscures the more meaningful differences among their subpopulations. For example, the mortality rate for Puerto Rican infants is higher than for Mexican American infants, while Chinese and Japanese Americans have infant mortality rates lower than other Asian American groups (3). Small populations without great geographic dispersion and with great cultural diversity create a challenging research setting. It is difficult to collect readily generalizable data that can be applied to the development of universally applied treatment responses (4).

Two solutions are commonly employed to collect high quality data for small population subgroups not broadly distributed. First, one can use national sample survey techniques and oversample in areas with sizable populations of the minority groups of interest. To do so requires the use of many racial and ethnic identifiers and is likely to increase both the size of the sample and the cost of the survey.

Another approach is to survey the major racial/ethnic population subgroups in the areas where they dominate. This technique was employed in the Hispanic Health and Nutrition Examination Survey, which covered approximately 76 percent of the 1980 Hispanic-origin population in the United States, by surveying the three major subgroups in selected areas. Mexican Americans were surveyed in Arizona, California, Colorado, New Mexico, and Texas; Puerto Ricans were surveyed in the New York City metropolitan area (New York, New Jersey, and Connecticut); and Cuban Americans were surveyed in Dade County, Florida (5).

Because the largest numbers of Asian and Pacific Islander Americans are clustered in California, Hawaii, Illinois, New Jersey, New York, Texas, and Washington, this group might be amenable to a nationally representative analysis done in these seven states (6,7).

California, the state with the largest number of Asian and Pacific Islander Americans (2.8 million), currently collects data for 14 different Asian and Pacific Islander groups (Filipino, Chinese, Vietnamese, Japanese, Korean, Asian Indian, Khmer [Cambodian], Thai, Laotian, Samoan, Native Hawaiian, Tongan, Guamanian, and other Pacific Islanders). But in published reports, it lumps all these groups into the category of "Asian and Other," a category that also includes American Indians, Eskimos, and Alaskan Aleuts. Reporting data in this manner obscures important differences among these groups and negates the possible benefit from the use of multiple ethnic identifiers during data collection (8).

When the relevant populations are surveyed, data on the degree of acculturation and immigration history need to be collected. For example, if survey respondents are overwhelmingly the more assimilated and American-born Asians, then their health profiles may obscure the morbidity and behavioral risk-factor patterns of newly arrived immigrants from the same place and instead reflect a greater prevalence of diseases such as diabetes and breast cancer, which are greater among more assimilated populations (8). For American Indians/Alaska Natives, a problem arises in gathering accurate demographic data because of the cycles of urban-rural-reservation migration by individuals in various tribes. This migration can cause problems related to overcounting and undercounting, and in treating infectious conditions such as HIV/AIDS (9).

Language familiarity, another aspect of acculturation, also is a factor in collecting reliable data. If concepts are indiscriminately transferred from one language or culture to another, misinformation may be collected from the survey population. In addition, if questions are posed as double negatives, as were some of the questions on the 1987 National Medical Expenditure Survey, they will be especially hard to understand by those for whom English is a second language (10).

What types of errors have been found in data collected on people of color? Indians and other minorities in urban areas are routinely undercounted. This leads to an overestimation of mortality rates for these groups because the population base (or denominator) used to calculate these rates is reported to be smaller than it

really is (10). Undercounting of minorities also can result in overstating the cumulative incidence of AIDS, for example, since the base against which this condition is reported has been underenumerated (11,12).

On the other hand, urban Indians are often misidentified by service providers, an occurrence that can result in underestimation of mortality rates because the numerator in the fraction used to compute these rates is too small (13,14). In Oklahoma, infants born to American Indians have a 28 percent chance of being misclassified as another race on death certificates. After adjusting for this underreporting, the infant mortality among American Indians in Oklahoma almost doubled from nearly 6 deaths per 1,000 live births reported for 1987 to 1988 to an estimated rate of more than 10 per 1,000 live births for the same period (10). In addition, the National Mortality Followback Study found evidence that American Indian/Alaska Native heritage may be underreported by 65 percent on death certificates, yielding low estimates of the deaths due to diabetes among this population (15).

Although inconsistent racial classifications for infants at birth and death were reported for only 1 percent of infants classified as white and 4 percent of infants classified as black at birth, more than 43 percent of infants classified as members of all other races at birth had a different race at death (13). Nearly equal proportions of infants classified as Filipino and Japanese at birth were classified as white at death (45 percent and 40 percent, respectively); similar proportions were consistently classified as Filipino and Japanese at both birth and death (48 percent and 46 percent, respectively). Only 70 percent of infants were assigned the same Hispanic origin (Cuban, Mexican, or Puerto Rican) both at birth and death (13). The degree of misclassification probably varies by location. Steps need to be taken to refine and improve the quality of the data collected on people of color.

A "chicken-and-egg" situation involving data can exist that may continue the status quo with regard to the health of people of color. The data problems associated with Asian Americans illustrate this (16). Health problems of Asian and Pacific Islander Americans sometimes are ignored because no population-based data document the problems; yet existing, population-based data collection and research leave out Asian Americans because their health problems are not acknowledged.

Research and Treatment Needs

Even medical officialdom has begun to acknowledge its lack of attention to the health needs of women in the formulation of research designs and treatment protocols (17). For women of color, the issue is even more dramatic: including white women in an experimental group may yield knowledge and results relevant to treating white women, but not for treating women of color. For example, how frequently should women be screened for breast cancer? Guidelines that recommend screening for women 40 years of age and older ignore the higher than average risk for breast cancer among black women younger than age 40. Should different guidelines be established for black women? What guidelines should be set to screen American Indian/Alaska Native women for whom diabetes, tuberculosis, and liver disease are more common than among the general population (18)? Why is hypertension a problem among Native Hawaiian women beginning very early in life, and what is the best way to control it? Questions such as these cannot be addressed without integrating knowledge of the needs of racial/ethnic minority women into research and treatment evaluations.

Alcohol and substance abuse, and HIV/AIDS also highlight the need for research and treatment oriented to the female client population. Addiction treatment alone for American Indian/Alaska Native women suffering from alcoholism is not enough. The cultural and social experiences of American Indian/Alaska Native women must be incorporated into the treatment setting in order to adequately answer the question, "What is the pain she is trying to numb?" (19).

Facilities to Serve People of Color

In what settings are research and treatment being applied to meet the needs of women of color? The policy of targeting resources and facilities to people of color has encountered snags throughout history. The provision of hospitals for blacks, the designation of service areas for American Indians/Alaska Natives, and the targeting of health care services for Native Hawaiians all illustrate these problems.

The closing of hospitals serving predominantly black communities is controversial and often found to be driven more by the racial composition of the hospitals' neighborhoods than by economic conditions (20). The concept of these hospitals dates from an era when racial/ethnic minority populations were more highly segregated in America's cities than many are today. As newer waves of immigrants have come to America who are able to choose increasingly not to live in racial/ethnic ghettos, it has become harder to define territorial "communities" for specific racial/ethnic groups and to meet their needs by placing facilities in these areas.

For example, the IHS regional designations reflect

the population distribution of American Indians/Alaska Natives in 1955 and are outdated today, when only 22 percent live on reservations and 67 percent live elsewhere, with a growing share in cities (21). For Alaska Natives who derive their livelihoods from seasonal employment such as fishing, it is difficult to get care during fishing season if the IHS facility is several hundred miles from home. In most of Alaska, transportation poses a nearly insurmountable barrier to care since there are only three urban IHS clinics to serve all the eligible people in the state. Many Alaska Natives need temporary housing when they seek care at IHS medical facilities since they are unable to return home the same day (9).

Native Hawaiians must solve problems similar to those faced by American Indians/Alaska Natives. Although recognized as a high-risk group and in need of targeted health care services because the living patterns on the Hawaiian Islands are racially/ethnically mixed, it is difficult to place facilities to serve large numbers of the target population of Native Hawaiians. On islands other than Oahu (the island on which Honolulu is located), Native Hawaiians are more likely to postpone care until they perceive a crisis in order to avoid travel problems.

Community-based, consumer-friendly facilities are often at a disadvantage when competing against larger organizations for resources to serve their clients. For instance, when seeking funds under the Ryan White Comprehensive Resources Emergency (CARE) Act of 1990, many smaller community groups oriented to serving women with HIV/AIDS complain of losing out to hospitals and larger organizations. In addition, the "AIDS establishment" of service organizations often fails to recognize local groups serving women of color with AIDS, making case referrals difficult (22,23). Programs developed by organizations such as the National Black Women's Health Project, The Native American Women's Health Education Resource Center, and the National Latina Health Network seek to bridge this gap in health care funding and services for their constituents.

The "one-stop shopping" model to provide health services for women has not caught on. Such centers would provide child care along with comprehensive services for the needs of women, including reproductive, internal medicine, mental health, substance abuse, and HIV/AIDS care (9).

Need for Minority Physicians and Providers

The federal government has designated several racial/ethnic groups as underrepresented in the population of physicians (and other health care providers) and has offered incentives to change this based on the dual beliefs that minority doctors tend to locate in underserved areas and that they tend to care for more minority patients. In 1990, although black Americans were nearly 4 percent of all physicians (as opposed to nearly 12 percent of the general population), their share of the physician population had increased very little since 1950. Similarly, Hispanics were only 5 percent of physicians in 1990, although they were 9 percent of the total U.S. population. In 1989, Hispanic dentists, registered nurses, pharmacists, and therapists accounted for between 2.2 percent and 3 percent of these professionals, as well (24). American Indians/Alaska Natives were only 0.1 percent of all physicians, while they comprised 0.7 percent of the U.S. population. Asian and Pacific Islander Americans, however, were nearly 11 percent of all physicians, while nearly 3 percent of the U.S. population (25).

The belief that increasing minority representation among doctors will increase access of minorities to health care is supported by data on black physicians. Although more than 80 percent of blacks report having a white physician as their primary provider, 80 percent of the patients of black physicians are black (26). The regional distribution of black and American Indian/Alaska Native physicians, in particular, seems to be influenced by the location of substantial numbers of like minorities. It is estimated that between 60 percent and 80 percent of the students from underrepresented racial/ethnic groups trained in the health professions voluntarily practice in or close to designated shortage areas with large minority populations (10).

Research on matching providers and patients on the basis of race or ethnicity is generally inconclusive, even though there seems to be consensus that the effectiveness of treatment (especially for substance abuse) is enhanced when the provider is culturally knowledgeable. Several studies suggest that racial/ethnic match between patient and provider reduces premature termination and increases the length of time treatment is received in community mental health clinics (27). Other research has shown that the likelihood (relative to whites) that people of color would seek and, once begun, complete treatment for alcohol or substance abuse could be increased with greater cultural sensitivity and awareness within treatment programs and facilities, including more frequent patient-provider match (28,29). The lack of a world view shared by both American Indian/Alaska Native patients and their providers has been associated with high treatment dropout rates for this group. In addition, higher com-

pletion rates have been observed for black Americans treated in informal settings located within the black community, a setting that helps to frame the rehabilitation experience outside of the dominant culture and make it more acceptable to clients (29).

Although the federal government considers Asian Americans to be overrepresented among physicians, this assessment rests in part on the belief that all Asian American groups can be served by "generic" Asian health professionals. Gains in the number of health care workers among Asian Americans have occurred primarily among the second and third generations, and specifically among Japanese and Chinese Americans (30). Among psychiatrists, for example, Asians were nearly 9 percent of the total in the United States in 1984. Half of these (51 percent) were Asian Indians, however, and only 23 percent were of either Chinese or Japanese ancestry. This mix of providers differs markedly from the representation of Asian Americans in the United States.

The unmet demand for multicultural and multilingual health professionals needs to be addressed. However, discrimination in residency placement and licensure limits the ability of foreign-trained medical professionals to serve in the United States and help meet this need (31). In addition, although the failure of facilities supported by federal funds to have medically trained translators to meet the needs of patients whose primary language is not English violates civil rights statutes, this is the status quo at many American health care centers. Continued failure to support the development of multicultural and multilingual health professionals discounts the degree to which language and culture influence access to and utilization of services, and can contribute to continued unnecessary disease and death.

Conclusion

Women of color are members of extremely heterogeneous groups. For example, Hispanic women include both Puerto Rican women, born with U.S. citizenship but also having a high incidence of AIDS and higher than average infant mortality rates, and Mexican American women, many of whom are foreign-born and have lower than average infant mortality rates. Asian American women, in another example, include Asian Indian women, 80 percent of whom get early prenatal care but whose infants are twice as likely to have low birth weights as infants born to Japanese American women, 86 percent of whom get prenatal care in the first trimester of pregnancy and whose low infant mortality rates may reflect this. In addition, American Indian women in the Southwest have low cancer rates while their sisters in the Plains states and Alaska have high rates. Finally, babies born to black immigrant couples are low-weight less often than babies born to black native-born couples.

Generalizations that create health profiles for women of color are dangerous because exceptions to the rules are numerous. The challenge instead is to refine the knowledge and understanding about these groups to the point that individualized care can be provided to each and every woman of color, regardless of race or ethnicity and health problem.

During the 1960s and much of the 1970s, increasing access was a major health policy objective. Since the 1980s, the emphasis has shifted to cost containment and the use of managed care to achieve this end. This focus may ultimately reduce access to care for women of color. If, under the guise of cost containment, renewed emphasis is placed on changing individuals' behavior, it would be all too easy to cross the line to "victim blaming."

Structural problems—such as limited employment opportunities, the lack of resources beyond those to meet basic needs, and the lack of public transportation—all contribute adversely to an individual's ability to change high-risk health behaviors. Programs designed to respect cultural norms and values and that are cognizant of structural limits will be the most effective means to enhance the health of women of color.

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